JOURNAL

OF THE

UNITED STATES CAVALRY ASSOCIATION.

VOL. III.

SEPTEMBER, 1890.

NO. 10.

WITH THE RESERVE BRIGADE.

SECOND PAPER.

THE retreat of Early's defeated forces, after the battle of Winchester, being covered by darkness, the pursuit was suspended and the cavalry bivouacked for the night in the fields adjoining the turnpike a short distance south of the town, and were in the saddle at daylight on the morning of September 20th. Pursuing south, on the two principal roads, it was soon found that the enemy had taken up a strong position at Fisher's Hill just south of Strasburg. Valley here narrows in so that both flanks of Early's army were protected by the precipitous mountain ranges on either side of the Valley. General Sheridan, having formed a plan of battle for the 22d, in which the Eighth Corps, under General Crook was to be used to turn the enemy's left flank by scaling the mountain on that side, sent General TORBERT, commanding the Cavalry Corps, with the divisions of MERRITT and WILSON, to proceed through the Luray Valley, so that in the event of victory at Fisher's Hill he might fall upon the retreating columns of the enemy at Newmarket on the Valley pike some thirty miles south of Strasburg.

On the 21st, we marched to Front Royal where we passed the night, and on the 22d, resumed our march. Soon after noon we came

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upon the enemy strongly intrenched near Millford. The Luray Valley at this point contracts into a gorge, and the rough, inaccessible character of this mountainous region rendered the entrenched position of the enemy an almost impregnable one. The road here crosses a deep and unfordable mountain torrent, a tributary of the Shenandoah, and the bridge having been destroyed, the enemy from behind well constructed earthworks on the opposite bank made a determined resistance to our further advance. The greater portion of the force was dismounted and engaged the enemy on foot, while the artillery went vigorously to work shelling the position; but all seemed to be of no avail. The brigade was held in reserve well up to the front: it was in fact under fire much of the time, and had several men and horses disabled. During the afternoon the brigade commander, with several other officers, made a careful examination of the ground in our front and the position of the enemy, and all became convinced of the utter hopelessness of any attempt to carry it by direct attack. We had confidence, however, that a way out of the difficulty would be found by a movement around one of the flanks of the enemy, and waited patiently to take instant advantage of any movement indicating a weakening or withdrawal of the force in our front; but as the afternoon wore on the outlook began to appear somewhat discouraging. The same steady rattle of carbine shots could be heard on the right and left with the occasional cheers of some portion of the line essaying an advance, but the location of the lines remained obstinately the same. Finally, as the approach of evening seemed to demand a movement of some sort or an acknowledgment of defeat, an order was received by Colonel Lowell to charge with his brigade. mounted, down the road and endeavor to carry the position by a direct attack.

The brigade was at this time behind the crest of a hill which overlooked the stream in our front, the whole face of the hill being covered with a dense growth of timber and underbrush. The road led down the steep hill toward the creek, and at the foot of the hill turned sharply to the left. The road was here formed by an excavation from the side of the hill, with a precipitous wall of rock on one side and the swift and deep mountain torrent on the other. After stretching along the stream in this manner for a hundred yards or more, it abruptly terminated at the abutment of the burned bridge. The enemy, from his entrenchments on the opposite bank of the creek, within short rifle range, commanded the whole of that portion of the road extending along the bank of the stream. A force, supposing it to have reached the abutment of the destroyed

bridge, would have had no method of escape from the murderous fire of the enemy, and must have plunged into the swift and roaring torrent in the vain attempt to cross, or have retraced its steps back along the bank and up the hill. The brigade was mounted, sabers drawn, and we moved in column of fours into the road. As we started down the hill, the Rebel gunners, with fine accuracy, dropped a couple of shells into the head of the column, badly demoralizing the first set of fours. The requirements of romance and poetry demand that at this juncture we should have taken the gallop, and the charge, and ridden with cheers, colors flying, and blades tossed aloft, into the murderous cul-de-sac awaiting us,

"Though the soldier knew Some one had blundered;"

But it would not have been war, and Colonel Lowell, appreciating the situation, and preferring to save his brigade for future work, commanded instead, "Fours right about," and we returned to our position behind the hill.

An examination of the ground two days later, after the withdrawal of the enemy, fully justified this action. Had the brigade charged when first directed to do so the loss must have been frightful, with no possibility of any compensating advantage. It was certainly very unfortunate that no way could be found of carrying or flanking this position. The battle of Fisher's Hill was won on the afternoon of the 22d, and General Sheridan in his report says: "Had General Torbert driven the force in his front, or turned the defile and marched to Newmarket, I have no doubt that we would have captured the whole Rebel army."

On the 22d we withdrew, leaving the enemy in possession, and marched back toward Front Royal. Soon after daylight, as the column was moving sleepily along a mile or two from Front Royal, we were startled by shots and cheers in front, and perceived the Second Cavalry charging, while the ambulance train which preceded the advance of the column appeared to be in some confusion. We at once went forward, at the gallop, to support the Second, and joined in a lively chase after a band of Mosby's guerillas, who, seeing the ambulance train with only a small escort in advance, had thought it a good opportunity to secure an invoice of mules for Early's army, and to supply themselves with clothing and the many other useful articles which a Yankee train usually afforded. But it is presumed they would have hesitated before undertaking this pleasant enterprise had they known that two divisions of cavalry were close at hand. The pursuit was continued in every direction after the dis-

persed band as long as a "grey coat" could be seen, and then we rallied at Front Royal.

A number of Mosby's men were killed and some ten or twelve taken prisoners. The Second lost a brave officer, Lieutenant Mc-MASTERS who, in the excitement of the chase, became separated from his men and was surrounded and captured by the "bushwhackers." After robbing him of his watch, money, and boots, they cruelly and deliberately shot him through the body. These facts were learned from his own lips, he having been found by his men after the pursuit was ended, and taken to Winchester, where he lived several days. A few days before the battle of Winchester, several men of Custer's brigade had been captured and cruelly murdered by Mosby's The prisoners taken on this occasion were turned over to the provost guard at Front Royal; and, later in the day, several of them were found hanging by the neck to trees near the town, with placards attached to their feet setting forth that they had been executed in retaliation for the shooting of a Union officer after capture. Camp talk at the time (whether truthfully or otherwise cannot be stated) attributed these hangings to the incensed comrades of the men of Custer's brigade who had similarly suffered a few days previously.

It will be acknowledged by all that the crimes of which Mosby's men were guilty were deserving of the severest punishment; and yet these retaliatory measures were extremely ill-advised. A few days later, Mosby's men having captured a number of dismounted men who formed the escort to a train en route to Harper's Ferry, they were required to draw lots that a number might be selected for execution. The men so selected were taken to the vicinity of Berryville, where several of them were put to death. Fortunately the futility of retaliation as applied to the inhuman acts of these guerillas became apparent to our people, and the punishment of their crimes was deferred to a more convenient season.

The news of the battle of Fisher's Hill having been received on the 23d, we, by a night march, retraced our steps to Millford, found the strong position of the enemy abandoned, and pushing on, at about 2 p. m. of the 23d, encountered the enemy's cavalry near the town of Luray. The valley at this point opens out into a comparatively smooth and level country, suitable for cavalry operations, and by a determined attack we regained our self-respect which had been somewhat impaired by our repulse at Millford. The enemy was routed and only escaped destruction by a rapid retreat, our pursuit being somewhat less vigorous than usual, owing to the jaded condi-

tion of our horses from the incessant and severe work of the previous days.

On the 25th we reached Newmarket and, finding ourselves in rear of our victorious columns, pushed forward, reaching Harrisonburg and the front the same day. Early's army, continuing its retreat, crossed the Blue Ridge, leaving, for the time, the Union forces in undisturbed possession of the Valley. Merrit's division was ordered to Port Republic, and General Torbert with Wilson's division and the Reserve Brigade, temporarily detached for the purpose, to Waynesboro via Staunton. Orders were given for the destruction of the railroad bridge across the South River at Waynesboro, and, in falling back, for the burning of all barns containing forage, all mills, and in short, for the complete destruction of everything which could contribute to the subsistence of the Confederate army. This was in accordance with the determination of General Grant that this fertile valley should no longer be used as a supply depot for the enemy.

Arriving at Waynesboro on the 27th, we picketed strongly south of the town in the direction of Rock Fish Gap, where the enemy was found in considerable force with artillery in position. On the morning of the 28th, the advanced posts were reinforced until quite a respectable skirmish line was formed, with the remainder of the brigade in reserve near Waynesboro. A large portion of Wilson's division was employed in carrying out the orders for the destruction of supplies. A force went to work at the railroad bridge early in the morning and wrestled with it all day without accomplishing its overthrow. It was a well constructed iron bridge, and in the absence of proper appliances and skilled workmen it was no easy task to demolish it. The day was bright and pleasant, and during the whole morning all remained quiet on the picket line. About noon a few shots were exchanged with some of the enemy's scouts who attempted a stealthy reconnaissance of the force in their front. They promptly withdrew upon being discovered and all became quiet again, though the opinion was freely expressed by officers on the advanced posts that we would have our hands full before night.

At about 5 P. M., without the slightest warning, our skirmish line was furiously attacked and driven in, and a force of cavalry came charging down the road yelling as though the fate of the Confederacy depended upon the strength of their lungs. The squadrons forming the immediate support to the skirmish line were instantly in the saddle and, with sabers drawn, moved to the front, took the gallop and the charge, to meet the noisy force rapidly approaching.

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Either because we made the more noise, or because they did not like our appearance, they would not permit us to make a closer acquaintance, but went about and back in the direction from which they had come. We were continuing our headlong course in the endeavor to overtake them, when, looking to the left, we saw a long column of Confederate infantry marching steadily up the railroad track. and a glance along the grey line showed that they were pouring out of the railroad tunnel which, at this point, pierces the mountain. We, in turn, thought it prudent to go to the right about and fall back toward our reserve. Finding, however, that we were not pursued. we again threatened their advancing cavalry force, by a succession of charges, as it continued to advance under cover of the infantry. It never waited to receive our attack but seemed to endeavor to draw us on so that we might suffer from the fire of the infantry. which was advancing on both sides of the road with skirmishers well out. A battery now commenced a vigorous shelling and it began to look as though we were being attacked by the whole Confederate army. The remainder of the brigade came up, a line was formed, and an effort made to retard the advance of the enemy until Wilson's division could prepare to receive him, but, in spite of all our efforts, we were steadily forced back into the little village of Waynesboro, where we were assailed by what was more formidable than the enemy's bullets-the tongues of the women. The variety of epithets in their vocabulary was truly astonishing, and when their supply of these was exhausted they did not hesitate to resort to missiles of a more tangible nature with which they pelted us from the windows of their houses. The remainder of the Confederate force, infantry, cavalry, and artillery, coming to the assistance of the women, we were ignominiously expelled from the town, and the enemy, as though the object of his tremendous attack had been accomplished, appeared for the time contented with his achievement: or, it is possible, paused to exchange congratulations with his fair allies. Wilson's division being now withdrawn toward Staunton, the Reserve Brigade was directed to deploy a skirmish line for the purpose of retarding, as far as possible, the enemy's advance.

It was now quite dark; and the Rebel artillery treated their friends in Waynesboro to a brilliant pyrotechnic display by shelling the supposed Yankee position. Our men appeared to enjoy it equally with the other side, as its only effect was to hurry up Wilson's stragglers, some distance in rear of our line. While awaiting the enemy's advance it was reported that a force was marching along the railroad track, which here runs through a somewhat deep cut, and, by pass-

ing around our left flank, was getting to our rear. Upon investigation this report was found to be correct and the circumstance was reported to the brigade commander, but, owing to the darkness of the night and the consequent difficulty of prompt communication, some time elapsed before orders were received for the withdrawal of the skirmish line. This was finally accomplished without trumpet signals and as silently as possible.

The brigade having assembled, we found our ranks considerably depleted by the rough handling we had received. Some of the men, after our hasty withdrawal from the town, had continued on the road to Staunton supposing the brigade had retreated in that direction. One regiment of the brigade was not present, having been detached on a reconnaissance before the attack was made. While awaiting orders in the darkness, the officers having assembled and being engaged in discussing the situation, a number of shots were fired directly in our rear. General Torbert and the officers of his staff were a short distance from us, and one of them called out: "Stop that firing! You are firing on your own men." The answer came in tones more forcible than polite: "We know d-d well who you are!" And another volley followed. An officer in the group around General Torbert could be heard directing some one to ride out and have that firing stopped. Then, after a moment's parley, a distant voice from out the darkness called: "Who are you?" The staff officer replied in stentorian tones: "General Torbert and his staff!" A crash of musketry-and instantly a line of fire appeared directly in our front-we having faced to our late rear-and a swarm of bullets whistled over and around us like the swift and angry flight of some new sort of night-bird. In an instant all was confusion. The only command was: "Come on!" as Torbert and his staff, followed by the Reserve Brigade, staff and line, made a rush out of the field into the road, and tore madly past the lines of the enemy's infantry, deployed along the rail fence which bordered the road. The line was distinguishable only by the sheet of flame from the muzzles of the muskets which seemed almost to touch the flying horsemen. Had the road been obstructed dire confusion and slaughter must have resulted; but, fortunately for us, our tricky adversaries had neglected this obvious precaution in their little bagging game. In a few brief moments we had passed the line of fire and, a little further on, halted and reformed. It was impossible at this time to form any idea as to our casualties. The different regiments of the brigade were represented by fragments only, but we knew, of course, that all absentees were not killed or captured.

In the disorganization incident to the darkness many officers and men had continued their course along the road; and I suspect that some of the men who knew of the movement of the enemy's infantry to our rear had exercised that freedom of judgment which was at this time the acknowledged prerogative of the American soldier, and had taken the road to Staunton before the night attack was made. It resulted, however, that our losses in this affair, although considerable, were not excessive; the explanation being found in the fact that the road over which we passed was sunken several feet below the level of the fields in which the enemy was posted and that, consequently, the most of their fire passed harmlessly over our heads as we hugged the necks of our horses in the wild ride past. Resuming our retreat, a rear guard was designated and directed to build barricades across the road at intervals and defend them stubbornly against any attack.

The march back to Staunton was trying in the extreme. The night was so black that it was impossible to distinguish friend from foe at the distance of a few yards. Straggling parties coming in were in danger of being mistaken for the enemy, and the utmost care and circumspection were requisite to avoid disastrous mistakes. Fortunately the enemy did not pursue, and before daylight we reached Staunton, where we found Wilson's division in position with a strong picket line established, so that the Reserve Brigade was given an opportunity to gather in its fragments and begin another day's work in something like order. Although this expedition might not have been considered a brilliant success, it was felt by the Reserve Brigade that its whole duty had been well and courageously performed, and that it had no cause for self-reproach or chagrin at its result.

On the 29th we marched back down the Valley to Bridgewater, burning everything of a combustible nature en route except dwelling houses. Our infantry fell back to Harrisonburg; and the cavalry, after completing the destruction of everything which could be of service to Early's army south of that point, proceeded to hold the advanced line at and near Mount Crawford, picketing stongly toward Mount Sidney, to which point Early's army advanced a day or two later. During the ensuing two or three days we were in immediate contact with the enemy's cavalry, and not a day passed without sharp skirmishing. At about this time General Wilson was relieved from duty with the Army of the Shenandoah and ordered west to take command of the cavalry forces operating with the armies under General Sherman. General Custer succeeded to the command of the Third Division which, under that dashing cavalry leader, added new lustre to its former brilliant record. General Sherman having

decided that, in the absence of proper lines of supply, a farther advance of his army was inadvisable, was directed to withdraw his forces to a defensible position in the northern end of the Valley near to his base of supplies, and to send such portion of his forces as could be spared to reinforce our armies in front of Petersburg. The movement commenced on the morning of the 6th of October, the cavalry stretching across the valley, continuing the distasteful work of destruction rendered necessary by the stern requirements of war. Powell's division prolonged the line into the Luray Valley and performed the same duty in that region. As our forces fell back the enemy advanced, manifesting unusual activity and aggressiveness, the cavalry, especially, making themselves extremely obnoxious.

This unusual activity was explained by several causes. Early's army had been reinforced by the return of Kershaw's division which had been withdrawn to Lee's army just before the battle of Winchester. Brigadier General T. L. Rosser, of the Confederate army, had also just arrived in the Valley with his brigade of cavalry, and by his rank had succeeded to the command of Fitz Hugh Lee's division, which, during the absence of its proper commander, disabled by wounds, had been commanded by Brigadier General Wickham. Rosser had a fine reputation as a cavalry officer, and hopes were entertained that under his command the Confederate cavalry would be able to retrieve its reputation, which had suffered in its various encounters with our mounted forces.

But there was another cause more potent than the arrival of reinforcements or General Rosser. Many of the officers and men of EARLY's army had their homes in the Shenandoah Valley, and in their marchings and counter-marchings through this region all had partaken of its hospitality and bounty. They saw this beautiful valley lying before them in flames, desolation, and ruin; from their point of view, the cruel and needless work of the hated invader. At this time it was impossible for them to appreciate the exigencies of the situation which made this destruction a necessary and justifiable act of war. To them it appeared a wanton and cruel act of vandalism, more in keeping with the times and methods of Wallenstein and TILLEY than with those of modern civilized warfare. They must have been more or less than human, not to have had their resentful passions stirred to their inmost depths, and their resolves strengthened and arms nerved to strike in defense of their burning homes, or to avenge themselves for the ruin already wrought. An unfortunate circumstance which occurred at this time doubtless added to the

bitterness of their feelings. Lieutenant Meigs, a brilliant young officer, a son of the Quartermaster General, and an engineer officer on Sheridan's staff, was killed near Harrisonburg under circumstances which led to the belief that he had been murdered by guerillas. In retaliation, General Sheridan ordered all dwelling houses within a radius of five miles from where his body was found to be burned. The valley and adjacent mountains were infested by lawless partisans who were sheltered, fed and protected, by the people of the Valley; and, although it has since been claimed that this young officer met his death at the hands of a cavalry soldier of Wickham's brigade, the circumstances, as they at the time appeared, fully justified General Sheridan's action.

There are two principal roads extending the length of the Valley; the Valley turnpike, a broad macadamized thoroughfare, and what is known as the "Back Road," which extends along the west side of the Valley near the base of the North Mountain. MERRITT's division held the pike, while Custer with his division marched on the Back Road. We were followed on the pike at a respectful distance by Lomax, while Rosser who, with his brigade, was full of confidence. devoted himself to Custer. On the 8th, Rosser became so persistent in his attentions that Custer's rear guard was engaged nearly all day, and it was found necessary toward evening to send the First Division to his assistance. General Sheridan, surprised and annoyed at this arrogance of a defeated enemy decided on the evening of the 8th, that he would halt his army for a day and give the cavalry of the two armies an opportunity to settle any little differences which might exist between them. That there might be no mistake as to his intentions he sent for General TORBERT and told him "To start out at daylight and whip the Rebel cavalry or get whipped himself."

Orders having been given for the whole command to be in the saddle at daybreak, we went to our rest with the consciousness that we had a tidy bit of work before us for the next day. Our camp this evening was on Tom's Brook, which runs along the base of Round Top Mountain about three miles south of Strasburg. We were in the saddle at dawn and, as we moved out across the little stream in our front, the rosy light of the rising sun could be seen over the summit of the Massanutten Mountain, presaging a lovely day and, as we hoped, success to our arms. Lomax and his men were already in motion, and as we came into position his lines could be seen forming in the distance. The Reserve Brigade was given the post of honor on the pike, with the Second Brigade on our right,

and the First on the right of the Second connecting with CUSTER'S left. The enemy's artillery opened as we began forming, got the range promptly, and pitched in their shells with fine accuracy until they were replied to by a section of Williston's battery of our brigade, and obliged to change position. An advance of the enemy's right having been promptly checked by a rapid movement of our left, he now deemed it prudent to get his men out of the saddle and established behind rail barricades. Our artillery was kept well up to the front and made lots of trouble for the Confederate troopers in their attempt to establish dismounted lines. It now became evident from the sound of artillery on our right that our forces on the Back Road were engaged, and we proceeded to crowd our adversaries by a general forward movement. The artillery on this occasion distinguished itself by keeping well up with our advance; and, by pouring in canister at short range, contributed in a great measure to the demoralization and final rout of the enemy. The opportune moment having arrived, we leave the artillery to shift for itself and move into the pike. The charge is sounded-the whole line goes forward with a cheer-and we ride for the battery which is now directly in our front; they are too quick for us; all the guns but one are limbered up and off at a gallop before we can reach them. This one gun they appear willing to sacrifice for the sake of the execution it will do at close quarters. There is one discharge which has no effect toward stopping the head of the column; the cannoneers can be seen ramming home another charge; the gunner is making frantic efforts to get it off, but his nerves are evidently at fault, and while he is yet adjusting his lanyard we are upon him and the gun is ours. Nobody thinks of pausing to secure trophies; we have the advance, and pressing on are soon in the midst of the flying rabble, their officers in vain expostulating, cursing, and imploring them to stop. The blinding dust of the pike obscures everything; Union or Confederate, we are all the same color, and as we come upon their guns one after another, the drivers plying whip and spur in the vain effort to escape, it takes a saber stroke to enforce a command to halt. Wagons, caissons, and ambulances are passed, and still the chase continues. We leave to our comrades in the rear the work of securing prisoners; our only thought is to press on so that there shall be no possibility of their disorganized forces halting to reform. We dash through the streets of Woodstock, and the people, even though the flying cavalrymen are their friends and neighbors, become so imbued with the excitement of the chase that they fairly cheer us on. Finally at the little town of Edinboro, eighteen miles from our starting point, when the last

trooper of Lomax's force is clean out of sight and everything on wheels is in our possession, we pause to take breath and permit our scattered forces to reform.

The length of the chase was such that the question of who should keep the advance was largely one of horse-flesh. The little squad of officers and men who had had the good fortune to keep their places at the front, having halted a moment before crossing the river at Edinboro, was joined almost immediately by the brigade commander, Colonel Lowell, alone and unattended, staff and orderlies having been left far behind. The remainder of the brigade soon came up, but as the work assigned to it seemed to have been completed it was there halted and reformed. The pursuit was at that point taken up by the Second Brigade and continued to Mount Jackson, eight miles further on, and twenty-six miles from where the attack was made. This affair has received the official designation of Tom's Brook; but the soldiers, having in mind the plaudits of the fair Confederates in Woodstock as they chased their friends and sweethearts through the town, called it "The Woodstock Races;" by which name it will always be known by those participants who were on the winning side. Rosser in his encounter with Custer on the Back Road fared no better. His forces were routed and pursued, on the jump, some fifteen miles, with the loss of all his guns, baggage wagons, etc. There were eleven guns captured altogether in this fight; five by our forces on the pike, and six by Custer. Several of them were quite new and just from the factory at Richmond, and were said to have been marked, "General P. H. Sheridan, care of JUBAL EARLY."

The decisive results of this cavalry action caused it to take rank as a battle; and the thanks of the War Department were tendered to General Sheridan and his cavalry in the following dispatch:

WAR DEPARTMENT, WASHINGTON CITY, October 12, 1864—8 p. m.

Major General P. H. Sheridan:

This Department again tenders its thanks to you, and through you to Major General Torbert, Generals Merrit and Custer, and the officers and soldiers under their command for the brilliant vic tory won last Sunday, by their gallantry, over the Rebel cavalry in the Shenandoah Valley. Under gallant leaders, your cavalry has become the efficient arm in this war that it has proved in other countries, and is winning by its exploits the admiration of the Government and the country.

(Signed) EDWIN M. STANTON, Secretary of War.

This was about the last of the Confederate cavalry in the Valley. In the organization of the Confederate cavalry each trooper owned his own horse, receiving from the Government a per diem allowance for its use. The divisions of Lomax and Fitz Lee were largely recruited from this region, and the destruction of the forage and crops, and the driving off of all the horses in the Valley was a severe blow to their efficiency, as it rendered it not only difficult for them to subsist their animals, but impossible for them to procure remounts or to afford their worn out animals an opportunity to recuperate. As bearing upon the "saber question," it may be of interest to quote from Early's report of this affair to General Lee, in which he says: "Lomax's cavalry is armed entirely with rifles, and has no sabers; the consequence is, they cannot fight on horseback, and in this open country they cannot fight successfully on foot."

MOSES HARRIS, Captain, First Cavalry.

TROOP AND COMPANY PACK-TRAINS.

THE system of pack-animal transport used in the United States and Mexico is of Spanish origin. The Spaniards excelled the rest of Europe in their art, and their descendants in Mexico improved upon them. The discovery of gold in 1848 suddenly peopled the mountains of California with thousands of miners, and large towns sprang up hundreds of miles from the coast. In the early days these were all supplied from the sea-board and from points on the Sacramento and San Joaquin river, by pack-trains, introduced and managed by Mexicans and native Californians; but many Americans soon engaged in this profitable business. Although the railroad and wagon train soon superseded these pioneer carriers throughout the greater part of the State, they never entirely displaced them; and there remains a mountainous mining district about 250 miles long by 150 miles wide, in northwestern California and southwestern Oregon, in which all freighting is done by pack-trains, which are organized, equipped and conducted according to what the long experience of intelligent men has proved to be the best methods.

The Department of Arizona, owing to the nature of the country and the service which the troops there are liable at any time to be called upon to perform, is better provided with pack-trains than any other. Nearly every post has a large one, and during my service there, January, 1885, to July, 1887, each troop of the Fourth Cavalry had its own train. A description of that of Troop "B," of which, as troop quartermaster sergeant, I had charge for a year, will fairly apply to all. The troop received from the Quartermaster's Department twelve mules, two of these for saddle animals and reliefs in case of accident, and ten aparejos and rigging complete. The mules were quartered in the troop stables, forage and other allowances being drawn for them, shod by the troop blacksmith, and turned out daily with the troop horses, so that they soon became attached to them and

indifferent to others, therefore easy to herd. They were looked after by the wagoner, farrier and stable orderly. These men were taught to pack and frequently practiced. So were others. The aparejos were kept in the stables. The quartermaster sergeant had charge of the stables, pack-train and kitchen, and drew and accounted for the forage, stable allowances and rations. He was required to have always on hand in the store room of the troop quarters ten days' rations, liberally estimated, with other articles necessary for taking the field, viz:

Flour 5	00	lbs.
Hard bread	50	66
Bacon	50	64
Sugar	75	66
Coffee	60	66
Beans	50	66
Salt	25	44
Baking powder	20	66
Box of ammunition (carbine)1	10	66
Box of mule shoes and nails, (two shoes and nails per mule) about	25	64
Six camp kettles, about	40	66
Two mess boxes, about	15	66
Twenty mess pans, about	10	44
An axe, spade, small coffee mill, two butcher knives, two long forks, two		
long spoons, three or four tin plates, three frying pans, a few		,
farrier's remedies, soap, pepper and matches, about	25	64

An excess over the ration, of one hundred pounds of flour and bread, fifty pounds of bacon, fifteen pounds of sugar and twenty pounds of coffee; allowing for the contingency of guides or couriers being attached for rations; for any necessity for "making the ration hold out a little longer;" and for the tendency of men, in the absence of vegetables, to consume an over-allowance of the above-named "component parts." The mess boxes were of light wood, about two and one-half feet long, one and one-half feet wide, and two feet deep, strengthened and made practically water tight by a rawhide cover. Six camp kettles were necessary because water was sometimes found in places inaccessible to live stock, whence it had to be drawn by ropes and kettles. One of the mess boxes then served as a watering trough, and the animals were watered without interrupting the work of the cook and baker. The coffee was roasted and placed in a bag made of a rubber blanket and was, once a month, taken out for use and replaced. The total weight of the above, including an officer's bundle of about thirty pounds, and twenty pounds of fresh bread always taken upon starting out, was about 1400 pounds, or an average of 140 pounds per mule, which the necessary protecting covers

brought up to about 145 pounds. Everything was weighed and divided into ten loads, of twenty side packs, allowance being made and places left for the bundle and fresh bread referred to. The camp kettles, being of three sizes, were telescoped into two sacks, ready for slinging over a pack. With each load were laid the sling-rope and lash-rope for lashing it to the aparejo.

The quartermaster sergeant and farrier slept in the stable. Upon notification at night of an order to move out, these men began putting the aparejos on the mules, being soon joined by four or five men from the quarters. The party then saddled, mounted, took the mules to the store-room, lashed on the packs, and joined the troop, which generally within half an hour from the receipt of the order was out of the post—usually in less time than if ordered out during the day, there being no herd to be brought in, nor men dispersed about the post on various duties to be sent for. On the march the train followed at sufficient distance to prevent the mules crowding in among the horses when the troop halted or was crossing bad ground. The cook and baker rode ahead, with one man, to keep the mules together during halts or to halt them when necessary, while four others rode in the rear, where the packs could be overlooked. The mess boxes were borne by the "kitchen mule," an animal selected for its good behavior, steady habits, and easy gait-shaking its rather miscellaneous load as little as possible-which always kept the trail, and could be easily caught when its pack needed adjusting. Upon reaching camp the mules were turned out with the horses or picketed, according to circumstances. Every soldier, as soon as he had finished his duty to his horse, brought an armful of wood for the cook and baker, these men having no assistants.

The twenty pounds of fresh bread was taken for the first meal after reaching camp. The hard bread was reserved for emergencies; to be used when from lack of fuel or reasons of precaution, the baker's large fire could not be built, and for issue to men detached for service away from the troop, as couriers, etc. The baker was required, after the first camp, to keep us always provided with bread for at least one day ahead. He baked in the twenty mess pans mentioned. These pans were of sheet iron, circular, and made in two sets, one about twelve inches in diameter across the top and nine inches across the bottom, and the other about eleven inches across the top and eight inches across the bottom. All had the same depth,—about five or six inches. They were thus very easy to pack in the mess boxes. The baker commenced by digging a trench a little over a foot wide and a foot deep, and about twelve feet long, built a fire

near it, and then mixed forty quart cups of flour with salt, baking powder and water in one of the mess boxes, and divided the dough as nearly as he could into ten equal parts, each of which was placed in one of the ten smaller mess pans. He then covered the bottom of the trench with a layer of coals about three inches thick, placed upon this layer the mess pan containing the dough, and covered each by a larger pan, bottom up, the sides extending around and below the edge of the lower pan and protecting its contents from ashes and dirt. He next filled the trench and covered the tops and sides of the double pans with coals, making an oven from which, in an hour and a quarter, he took ten loaves of four rations each. No separate cooking was done for the officers. Each carried his own mess kit and lived on the ration. paying therefor into the company fund. Every evening the packs were rearranged, the weights fairly distributed, the ropes put in place, and such changes as were necessary made in the rigging, shifting the side stuffing, lengthening or shortening the crupper, etc.

The foregoing describes a train attached to a cavalry troop, much lighter laden than under ordinary circumstances, because held ready to keep up with it at the walk, trot and gallop for twelve or fifteen hours a day, for several consecutive days, over rough country. The horses were favored by their riders sometimes dismounting and leading them, and by their saddles being occasionally removed, or cinches loosened, if only for a few moments. Besides, they carried live weights, but the pack-mule carried its dead load all day, without a moment's relief. Every halt was taken advantage of to cinch it tighter, and if it were stopped on the march for an adjustment of its load it made up for the delay by increasing its gait. I have known the troop to travel for three days in the Sierra Madre with the men dismounted and leading their horses almost the entire distance. It once made 140 miles the first three days after renewing rations. and in each of the above cases the pack-mules kept up, though some of them suffered very much. The troop spent five months in Mexico in 1886. For the first six weeks it was supplied by a large train which kept in its general course as a moving base of supplies. Whenever rations were drawn from this train fresh mules were taken to replace those which appeared to be weakening, the latter being received into the large train. After six weeks it was found better to have the large train accompany the troop, and it did so, the troop train being included in it, and all enlisted men being relieved from duty with it. Under those conditions, this was certainly the best plan. But when a troop is held ready to take the field at short notice

for scouts of ten or fifteen days, or longer, even in a section where it can be easily re-supplied without great deviation from its course, I consider the troop train the best.

* * * * *

Among the California, Oregon and Idaho trains, no mule carries less than 300 pounds, some of them 400, and I once saw one on Klamath river, California, loaded with an iron casting weighing over 500 pounds. But they travel from twelve or fifteen to eighteen or twenty miles a day, over good trails, and are well cared for under a perfect system. The moment a pack is observed riding too far to one side, too far ahead or behind, too high or too low, or aparejo or crupper appears too tight or loose, two expert men are at the mule's side, and the fault is almost instantly remedied. The gait of the best mules is the so-called running walk, which enables them to make the day's drive in as short a time as possible, without rocking their loads or shifting the aparejo. It is as hard on them to stand under a load as to travel under it; and, on the other hand, an hour's gallop is harder on them than a day's walk. The ordinary aparejo is generally used, and sometimes the Humboldt aparejo, so named from the county of California in which it originated. This consists of the ordinary aparejo, fitted over a wooden tree with cross-bar to which the sling rope is attached, projecting about two inches above the aparejo, and is used over very steep trails. Its advantage is the prevention of the sliding backward or forward of the load, which sometimes occurs with the common aparejo, without too tight cinching, or rather lashing. Its disadvantage, besides its lack of adaptability to the backs of different animals and the absence of elasticity in the tree, lies in the fact that the improper placing of a load by an inexperienced man is almost certain to make a sore back, while with the ordinary aparejo it might only unduly tire the mule. The saw-buck pack-saddle is very convenient for light loads and short distances; but the bearing surface is so small that, no matter how well fitted to the back, nor how heavily padded it may be, it cannot be used by the most expert man, with any considerable load, for more than a few days at a time without danger of giving a sore back.

> A. A. CABANISS, Second Lieutenant, Twentieth Infantry.

A RECONNAISSANCE WITH THE FIRST MAINE CAVALRY.

HE first of October, 1863, the Army of the Potomac was in bivouac about Culpeper, between the Rappahannock and Rapidan rivers. The Rebel army was south of the Rapidan. A movement by the Rebel army to turn the right flank of ours was discovered. GREGG'S division of cavalry, to which the First Maine belonged, was guarding the right flank and rear of our army, and the camp of the First Maine was at Sulphur Springs, near Warrenton. On the morning of the 10th of October, in pursuance of orders, the regiment broke camp and marched southwesterly past the right flank of our army, and bivouacked at dark near James City. The next morning before daylight a staff officer brought orders to the colonel for the regiment to move out at once. "Boots and saddles" was substituted for "reveille." Blankets were rolled and saddles were packed in haste, and the troopers mounted for their second day's march, without breakfast. On that day, the 11th of October, our army retreated to the north side of the Rappahannock, and the First Maine cavalry did its share in guarding its rear and flank. At dark the regiment found itself back in its old camp at Sulphur Springs, which it had left on the morning of the 10th.

These movements are given, as preliminary to the reconnaissance to be related, to show that the men had been in their saddles and the horses on the march two full days already.

The next morning, October 12th, long before daylight, having been summoned to report to brigade headquarters, orders were received to proceed with my regiment to the Blue Ridge at Gaines Cross-roads, (Chester Gap), thence along the Blue Ridge via Little Washington to Sperryville, (Thornton Gap), to observe any movement the enemy might make in that direction and report promptly whatever of the enemy might be discovered. The important character of the reconnaissance ordered to be made was impressed upon me by Colonel Gregg, the brigade commander. He authorized me to pick up and take along with my command a detachment of an-

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other regiment which was on picket, and which would have to be passed through.

The regiment broke camp and started before sunrise, and proceeded to Gaines Cross-roads without halting. Small parties of Mosby's, White's or Gilmore's men were seen in different places, but they caused us no delay. They were on the alert, however, and probably knew a great deal about the purpose of that grand movement of those two great armies which was already begun. At Gaines Cross-roads, the entrance to Chester Gap, Captain Paul Chadbourne with his troop, "I," was detached to observe and report to me whatever of importance might happen. The command then proceeded to Little Washington. On the way there a second observing party was detached and posted. On arriving at Little Washington, a detachment of one hundred of the strongest horses was selected and pushed forward under a field officer, (two field officers went, Lieutenant Colonel Boothby and Major Brown), to Sperryville, the entrance to Thornton Gap, with orders to return as soon as practicable. At the same time Lieutenant Harris, of Troop "F," with an escort of twelve men was sent back to Sulphur Springs with a report to the brigade commander, of our progress and all that had been done, and also that the command would return to Sulphur Springs as soon as the detachment returned from Sperryville.

Colonel Boothby's detachment returned a little before sunset with nothing of special interest to report. One hour was allowed it in which to unsaddle, groom, feed and make coffee. At the end of the hour we started homeward, just a little before dark. On our way we picked up the last party that had been left on the outward march, and made no other halt till Gaines Cross-roads was reached. Captain Chadbourne had seen Lieutenant Harris and party pass that point on their way in. He had nothing else of importance to report. It was then decided to send Captain Chadbourne, with a detachment that had had the most rest during the day, to Sulphur Springs at once with another report, and put the rest of the tired command into camp near Amisville to rest till morning.

Captain Chadbourne and his detachment therefore took the lead and the rest of the command followed. It was some five miles to the proposed camping place. As we drew quite near to it and to the town of Amisville, Captain Chadbourne's advance guard was briskly fired upon, and some of the men came back in confusion to the head of the column, where I was riding. It was supposed that the attack had been made by a party of guerillas who might have observed our going out, and were waiting in ambush for our return. In a few

moments, however, Captain Chadbourne came back and reported to me that a large force was in our front; that he was on higher ground and could see their camp fires far and wide. There were two dwellings near by, one on each side of the road, in which some poor white folk continued to live. Inquiries were made at those houses as to the troops in camp, and information was obtained that "A. P. Hill's corps had been going into camp about Amisville since three o'clock."

The two front troops were at once deployed to be in readiness to meet any attack. At the same time Lieutenant Colonel Boothby was to go to the rear of the column, instruct the captains, while passing them, to face their companies about, and conduct the column back to Gaines Cross-roads. Upon arriving at the cross-roads, he was to put out a picket on the Culpeper road, find a guide who could conduct us across the country to Orleans and then wait till joined by me. As soon as the column got well out of the way, the two deployed companies were ordered to withdraw and follow it, and with a small party I followed in the rear. We crossed a small creek and stopped to tear up the bridge over it, when a squad of the enemy that was pursuing, suddenly came upon us in the dark. We captured two of them and took them along with us.

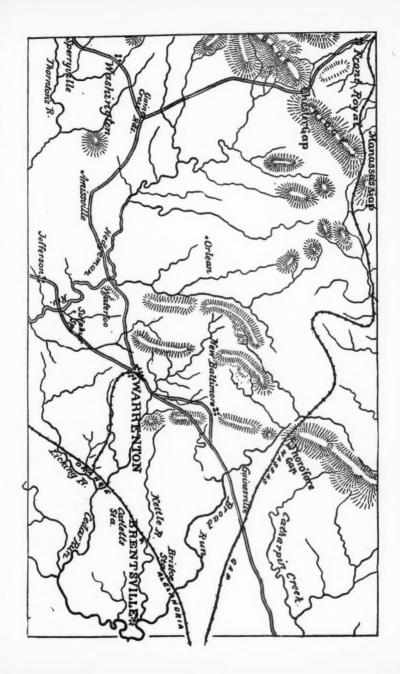
On arriving at the cross-roads I found that Boothby had secured a colored boy some fourteen years old for a guide. The boy said he had never been to Orleans, but "know the way most thar; it is only a hog path part way." It was now midnight and we were cut off by the Rebel army, but were not in any immediate danger of being captured. If we had thought only of our own escape we would have gone through Chester Gap towards Front Royal, thence through Manassas Gap, and thus back to our army by a long and safe detour. But we were the possessors of most important information relating to the welfare of our army. If General Meade remained at Rappabannock Station during the 12th, then we knew that LEE was fully abreast of him in a race for his communications to his rear. And had we known then the fact that three of our army corps had actually recrossed the river and marched toward Culpeper on that day, we would have been even more strongly impressed with the necessity of reporting promptly. Our object, therefore, was to get back to our army by the shortest line; to graze the enemy as closely as possible and not get caught. We were on the south side of the north branch of the Rappahannock, which we had always crossed near Amisville or at Sulphur Springs, and were now cut off from both those fords. It was therefore necessary to find a new route across

the headwaters of the river, through a few miles of wooded country wholly unknown to us, and at midnight, too. Hence we were very glad to accept the guidance of the little contraband who knew the way most thar, even by a "hog path part way."

No time was lost. The column was ordered to start, and I remained behind myself to see the picket called in, and then followed in rear. We had not gone far before the hog path was realized. The way was narrow but not straight. Without orders, the fours became twos, then the twos dissolved, till nearly the whole column was stretched out in single file. The head of the column could do well enough, because it could slow up at a bad place and increase the gait where the road was better. The rear, however, had a different experience. Just as it might quicken its pace to make up lost distance, it would perhaps get doubled up and huddled together into a most awkward jam upon those in front who had slackened their pace at a bad place. Only cavalrymen can appreciate the situation. The two prisoners became a burden and I abandoned them in the woods.

In due time our little guide announced to those who had him in charge that he did not know the way any farther. He had got to the outer edge of his little world. Then the column halted for the colonel to make his way to the front. He had been unable to pass it in the woods while it was moving. The march was resumed and we soon came to a country house which seemed to us to be as much out of place and lost as we were. We roused a corpulent white man, past middle age, but not old. He could not decide whether we were from the north or from the south, and we did not tell him for a while. He was questioned very closely as to the direction and distance of every place, also as to the roads and the prominent objects upon them. He was then given a twenty dollar greenback, was promised a horse to ride home on, and told to guide us to Orleans. My giving him money was unnecessary and a very simple performance on my part which I have never been especially proud of, but it indicates my gratitude for a guide that night.

Upon arriving at Orleans we were on a road that leads to Warrenton via Waterloo, a route, however, too near Amisville and the Rebel camps to venture over. From the guide I learned of a more obscure road by which we could pass Waterloo farther to the north and reach the Warrenton turnpike at a point farther east. The guide conducted us by that road and, when we had got well beyond Waterloo and the Rebel camp fires were well in our rear, our second guide was dismissed and the horse that he had been riding given to him At his request we waited till he concealed himself and his horse



in a piece of woods to remain while the column was passing, because he said "those soldiers in the rear will not let me take this horse if they see him." It is quite possible that he was right. Soon after dismissing the guide we reached the Warrenton turnpike.

Our route thus far had been chosen upon the supposition and hope that our forces were still at Warrenton; and, as we drew nearer the town, speculation was rife at the head of the column as to the probabilities of the case. We were hoping and rather expecting every moment to encounter the pickets of some of our forces. We were descending a hill through a thin belt of timber, when suddenly there was disclosed in the immediate front of the advance guard and just to the right of the turnpike, a camp of cavalry, all asleep, apparently. The column halted and Major THAXTER, of the regiment, without my knowledge, quickly rode into the camp and, sitting upon his horse in the very midst of the sleeping soldiers, called out, "What regiment is this?" A man raised his head and replied, "The Twelfth." "The Twelfth what?" asked the major. "The Twelfth Virginia, you damn fool!" was the Virginian's indignant reply. The major returned even more quickly than he went and, in a very loud whisper, reported, "Colonel! Colonel! it is the Twelfth Virginia Cavalry!" In the meantime a volunteer had been called for to ride into camp to determine the matter, and was just receiving instructions what to do and how to do it, when Major Thaxter so unexpectedly to me reported his discovery.

We then concluded, as was afterwards shown to be true, that the main body of Rebel cavalry was still in our front. This "Twelfth" regiment that we had run into was in a place of supposed safety, being between the main body of their cavalry and a corps of their infantry. There was no one stirring in camp, not even a camp guard. It is very possible that we might have captured the whole regiment. But capturing regiments was not in our line just then. We had just as much elephant already as we wanted to carry.

The fence was ordered to be thrown down on the north side of the road and the column headed northward over fields, pastures, stone walls, woods, high lands and low lands. Before the rear of the column left the road the "Twelfth" was considerably astir, but did not pursue.

New Baltimore was northeast from us, and there is a turnpike from Warrenton to that town. It was possible that the enemy had advanced even to that place. It was therefore desirable to proceed parallel with the turnpike at a distance from it, in order that we might approach New Baltimore from the northwest by the Thorough-

fare Gap road and thus avoid the possibility of again being cut off by the enemy. We had no apprehension of being captured, because we had an open country to the northward and could make a safe detour in that direction from any point, but, as before stated, we wanted to return to our army by the quickest and shortest line to tell it what we knew; yet we could not incur the risk of being cut off again at New Baltimore, because it would be daylight before we could get there.

It was about three o'clock in the morning when we ran into the "Twelfth," and took a new departure across the country. There was no moon and it was more or less cloudy all night. Yet it was not a very dark night. More or less stars were visible all the time. We picked our way the best we could for several miles, and came to a fine looking plantation house surrounded by trees whose shade made the entrance through the enclosure quite dark.

A loud rap brought an elderly and refined appearing gentleman, accompanied by a colored boy who may have reached his teens, to the door. In the dark they could not tell who, nor how many we were. I learned from the gentleman that our cavalry had retired through Warrenton, followed by the Rebel cavalry, the day before, and that considerable fighting had been done. I also learned that we were about a mile northwest of the Warrenton and New Baltimore turnpike, and that we were then on a road by which we could approach the latter place from the northwest as desired. We took the colored boy for our third guide who conducted us by the indicated route, and we reached new Baltimore between daylight and sunrise -a "bright rosy morning." The only person discovered was one Rebel cavalryman riding over a hill beyond the town in the direction of Warrenton. He had probably availed himself of the opportunity to visit home or his sweetheart for a night. We passed through the little town and took the turnpike in the direction of Gainesville. We came to rising ground from which the turnpike in our rear could be seen a long distance, and upon which a patch of corn had been cut up and shocked. Here we formed line faced to the rear, fed our horses and unsaddled and groomed them by detachments. Many of the men made coffee.

After an hour's rest, we resumed the march by the shortest route to Bristoe Station. Major Brown, of the regiment, was dispatched to find and report to proper authorities our discoveries. He found army headquarters at Catlett's Station. As soon as it was discovered there who he was, where he had been, and what he knew, he became quite a lion, and he also knew how to make the most of the situation.

At a subsequent interview with General Meade, he emphasized to me the great value of the information which I sent him by Major Brown at that time. For two days he had not received any reliable information of the movements of the Rebel infantry, and was worried and annoyed in consequence. He blamed our cavalry for inefficiency, while in fact, as it subsequently appeared, the cavalry had done and was doing its best. The two cavalry forces were fiercely contending on the 13th for the ground between the two armies, and each became a curtain to conceal the infantry, which the other could not penetrate.

Continuing our march, we arrived in the vicinity of Bristoe Station about midday. We selected a comfortable place and abandoned ourselves to rest and sleep. The next morning we crossed the railroad but remained in the vicinity of Bristoe most of the day, watching the interminable wagon trains hastening to the rear through Brentsville. In the afternoon A. P. Hill's corps arrived at Bristoe Station and gave battle to our Second Corps, which lasted till after dark. Before dark we moved back to Manassas Junction, where we waited and observed the retreating columns of our infantry till late in the night. We did not make any special effort to find our command. The army was retreating and our division might come to us sooner than we could go to it.

Near midnight the last of our infantry passed us. Our cavalry division was passing to the rear below us at Union Mills, but we did not know it then. So we resumed the march and followed the infantry across Bull Run to the higher ground toward Centreville.

As soon as we crossed Bull Run we were among the camps of the infantry, much to their indignation. Infantrymen never had much use for cavalry except when the latter was well to the front between them and the enemy. It was a mortal offense for cavalry to cross their line of march or to invade their camps. On this occasion we were orphans, or rather vagrants, and did not belong to anybody. We therefore meekly picked our way among their bivouacs until we found a space large enough to form on and dismount. The cavalrymen then quickly sought their beds beneath their horses' heads, each with an arm or leg through the bridle for a hitching post. Next morning, however, found us surrounded by many friends, among whom I especially and pleasantly remember Colonel Frank Heath, of Maine.

During the forenoon we learned that our division was in the vicinity of Union Mills and Fairfax Station, and we had started for the latter place to join it, when we were met by General WARREN who gave me orders to turn back, advance to Manassas or beyond,

until we found the enemy, and capture some prisoners if we could. Frequent reports were to be sent back to him. We advanced to Manassas and met the Rebel cavalry just at Fort Beauregard. We skirmished with them and held them in check till they brought some artillery to the front. We then fell back slowly to Bull Run again. Our batteries behind Bull Run opened upon the advancing enemy at long range, and an artillery duel and considerable skirmishing followed.

Soon after we met the enemy at Fort Beauregard, a young staff officer, a stranger to me, was noticed near the skirmish line. I asked him if he had any orders to communicate or suggestion to make, and he courteously answered that he had not, but only wished to observe. I soon forgot him. Perhaps I did not even learn his name at the time. Since then, however, he became my friend, and, for a time, my commanding officer, and recalled to me that occasion of our first meeting. His name was R. S. McKenzie.

The same evening we marched to Fairfax Station, where we arrived at a late hour. The next morning, the 16th, after an absence of four days, we rejoined our division and drew our forage and rations amidst congratulations and honors. We had been officially reported as captured.

We marched all day the 10th, all day the 11th, all day and night the 12th, were cut off twice by the enemy and employed three guides. We marched almost all day the 13th, were moving all day and night the 14th, and were marching and fighting all day the 15th. This is only a brief chapter of the services of the First Maine Cavalry.

This narrative should not be closed without a relation of the adventures and misfortunes of Lieutenant Harris and party, who were sent back from Little Washington on the 12th with a report.

The party passed Amisville before Hill's corps arrived there, but when it reached Jefferson, near Sulphur Springs, it encountered the Rebel cavalry. The party then retraced its steps to return to the regiment again, but before it reached Amisville it encountered the Rebel infantry and was thus hemmed in between the two forces. Lieutenant Harris avoided detection, took his party into some thick pines and concealed horses and men. Before dark two Rebel soldiers wandered into the same place and were taken prisoners right within their own camp. During the night Lieutenant Harris abandoned his horses, horse equipments, and sabers. The men took only their fire arms and their two prisoners. Thus Lieutenant Harris conducted his party out through the Rebel camps and across the river into the country northward.

The next morning they met White with a small party of his scouts who demanded their surrender. Lieutenant Harris took position behind a stone wall, displayed the two prisoners from the top of the wall and challenged the enemy to shoot. White evidently took in the situation, because he passed on. HARRIS then proceeded to the vicinity of Thoroughfare Gap, where he met Mosby with a large force to whom he had to surrender. The party was taken back to Sulphur Springs where it arrived after dark. There was our old camping ground. We all had left there only about thirty-six hours before and Harris knew the place well. There was a small frame house with a hall through the center. The entrances, both front and rear, were rather high and the steps of the rear door had been taken away, leaving it quite inaccessible. The door was too high for one to even jump from to the ground with safety, especially in the dark. The captives were shown into the front door of this house and ordered to go into the room to the right. The men went into the room, but Lieutenant Harris slipped quietly through the hall, lowered himself to the ground from the back door and concealed himself in some tall weeds. The captors soon produced a light to identify their prisoners when, behold! the officer was not there. Search was made for him indoors and outdoors, without success.

The retained captives were soon sent to Richmond. Lieutenant HARRIS concealed and subsisted himself several days within the enemy's lines, until the Rebel army retreated again to the Rappahannock, tearing up the railroad as it went, and our army in turn advanced to Warrenton Junction, at which point he reëntered our lines.

Lieutenant Harris was a brother of gallant General B. F. Har-RIS of the famous Sixth Maine Infantry. They served their country with sacrifice of limb and life. Lieutenant Harris was as brave and indomitable as the foregoing narrative indicates. He met a soldier's death while on picket, May 16, 1864, at Jones Bridge, on the Chickahominy. C. H. SMITH.

Colonel Nineteenth U. S. Infantry, Brevet Major-General U.S. A. Formerly Colonel First Maine Cavalry.

KILPATRICK'S RAID AROUND ATLANTA, AUGUST 18th to 22d, 1864.

A FTER the failure of the cavalry movements against the railroad about Jonesboro, under Stoneman and McCook, General Sherman became convinced that cavalry alone could not establish a permanent lodgment on the railroad below Atlanta, and therefore concluded to move so as to reach it with his main army. With this in view he reörganized his cavalry into three divisions under Generals Garrard, McCook and Kilpatrick. Kilpatrick was placed in the right rear in support of Schofield's exposed flank. Garrard remained on the left and McCook's division was held somewhat in reserve about Marietta and the railroad.

A large portion of the Confederate cavalry under Wheeler had been dispatched around the left flank of Sherman's army, and struck the railroad about Resaca. Another detachment of the enemy's cavalry appearing at Allatoona led General Sherman to believe that Hood had sent about all his cavalry to raid upon the railroad.

General Sherman at once ordered strong reconnaissances forward from both flanks. He was so well pleased with the dash and activity of Kilpatrick's work, together with its success, that he concluded to suspend the general movement of the main army, and send him with his division to break up the Macon road about Jonesboro, hoping that it would force Hood to evacuate Atlanta. With this in view two brigades of Garrard's division were dispatched from the left flank to the right rear to act as a reserve in support of Kilpatrick. These two brigades were commanded by Colonels Minty and Long, Minty the senior, and were composed of the following troops:

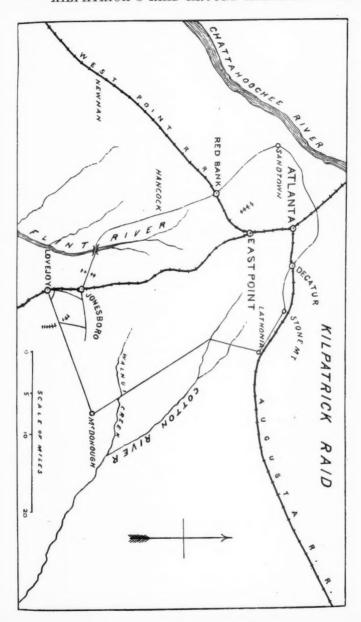
riist brigade.		
Fourth U. S. Cavalry	273	
		Major Jennings
Fourth Michigan Cavalry	250	Major Mix
Headquarters	73	Colonel MINTY
Second Brigade:		
First Ohio Cavalry	346	Colonel Egleston
Third Ohio Cavalry	477	Colonel MURRAY
Fourth Ohio Cavalry	479	
Headquarters	81	Colonel Long
Artillery:		
	90	Lieuts. Robinson and Bennett

Total..... 2,398

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These brigades marched from camp near Peach Tree Creek, northeast of Atlanta, at 1 o'clock A. M., August 18th. At 6 A. M., they were halted on the banks of Utov Creek. Resuming the march after a short rest they reached Sandtown, where Colonel MINTY reported to General Kilpatrick. In an article by Colonel Minty in the National Tribune, under date of July 10th, he says that General Kil-PATRICK at once assembled his brigade commanders, turned over the command of his division to Colonel Murray, assumed command of the corps, and gave them a synopsis of his plan, viz: That they were to march at dusk, so as not to be seen by the enemy, reach Red Oak on the Atlanta and West Point railroad about 9 o'clock, and Jonesboro on the Atlanta and Macon road before daybreak; ambulances and wagons to be left behind, and no wheeled vehicles to be taken other than artillery. Colonel Murray's division to take the lead; to push forward as rapidly as possible for Jonesboro; upon striking the railroad at that point to begin its destruction; to move south continuing the destruction. Colonel MINTY to follow Colonel MURRAY keeping close until reaching the Atlanta and Macon road; there to take position forming line of battle between him and Atlanta, facing Atlanta. They expected to meet no enemy en route other than such as might be sent from Atlanta. The troops commanded by Kilpat-RICK previous to the arrival of the brigades above referred to, numbered 2.400 men and four pieces of artillery, (I have not been able to get the organization of this division), the total strength of his command being 4,798 cavalry and eight guns.

At the request of Colonel MINTY he was allowed to take his ambulances, on condition that they were to be destroyed if they impeded, in any way, the progress of the troops. The march was taken up about dusk, but the Atlanta and West Point railroad was not reached until daylight, at which time the rear brigades were ordered to the front. The leading brigade had crossed the railroad when the head of the one following was sharply attacked by artillery and, VALE, in his "History of Minty's Cavalry," says, mounted infantry, but were repulsed, the aid of two pieces of artillery being brought into requisition. KILPATRICK then ordered an advance with instructions to drive the enemy towards Jonesboro. The country to the front was thickly wooded and poorly suited to the operations of cavalry. The woods were also barricaded. The leading regiment, the Third Ohio, was dismounted, and advancing on foot, drove the enemy in front of them across Flint River. The enemy here mentioned comprised the cavalry brigades of Fergurson and Ross. The bridge over Flint River had been partially destroyed and the enemy was posted on



the rising ground on the opposite bank in rifle pits. On the appearance of the Union troops the Confederates opened on them with artillery, which was answered by a similar compliment from a portion of the Board of Trade Battery. General Kilpatrick then ordered up the remaining pieces of artillery, which soon silenced the enemy's guns. Under cover of this fire, the two brigades under Minty were dismounted and being advanced to a somewhat sheltered position along the bank of the river, opened fire with carbines and soon drove the Confederates from their rifle pits. A portion of the troops crossed over on the stringers of the bridge and forming a skirmish line continued to drive the enemy. The bridge being repaired by making a floor of fence rails, the rest of the command crossed over and, with the assistance of the artillery, the Confederates were driven into the town of Jonesboro.

Storming columns were formed and the enemy was forced from the town. This put the Union troops in possession of the railroad, the permanent disabling of which would be a stepping stone toward the forced evacuation of Atlanta, and deprive Hoop of the only remaining link of communication with the Confederacy.

The destruction of the railroad was at once begun, one brigade being detailed to hold the enemy in check while the work progressed. About two miles of road was destroyed, when, on attempting to move further south, it was found that several regiments of Confederate infantry under General Reynolds were strongly posted behind barricades of felled trees. Finding it impossible to advance farther along the railroad, Kilpatrick left one brigade to hold in check Furgerson, Ross and Reynolds, and moved off toward McDonough, intending, by a circuitous route, to regain the railroad at Lovejoy Station, and continue its destruction. Information had been obtained in the meantime that Cleburne's division of infantry and Martin's division of cavalry were en route from Atlanta to reinforce the Confederates.

While halted on the march toward McDonough (4 a. m.) the rear of the column was attacked by the Confederate cavalry, two brigades dismounted, and one brigade of infantry, but was repulsed by a counter charge of Long's brigade, driving them back into Jonesboro. After proceeding about five miles toward McDonough the column turned toward the right, by a road leading directly to Lovejoy Station. When about one-and-a-half miles from the station, one regiment, the Fourth Michigan, was detached and sent by a branch road to the right, which crossed the railroad about one mile above Lovejoy Station. These troops succeeded in reaching the railroad and doing

some damage, but were shortly afterwards instructed to rejoin the command.

The main column, while advancing toward the station, struck a body of the enemy, mounted, about a mile from it, charged and drove them for several hundred yards, when a strong force was developed in front. One regiment, the Seventh Pennsylvania, was dismounted and pushed forward as a line of skirmishers to within a short distance of the railroad. The woods were thick along the roadside, and the railroad at this point ran through a cut, from three to four feet deep. REYNOLDS' brigade of infantry was posted in the cut and extended beyond both flanks of the Union skirmish line. Seeing this, the Fourth U.S. Cavalry was detached to extend and protect the flanks, one squadron to the left and the remainder to the right. It moved into position at the gallop, and was dismounted and moved forward at double time. When near the railroad the Confederates fired a withering volley, and springing from the cut, with a vell charged over the skirmishers and were only checked when another brigade was brought into position, and with the aid of four pieces of artillery.

While the head of the column was receiving such rough treatment the rear was attacked by a portion of Cleburne's infantry and Ross' and Fergurson's cavalry, driving it forward to the forks of the road before mentioned, where line was formed by the rear division, and, with the assistance of four pieces of artillery, the advance of the enemy was checked.

The position at this time was about as follows: In the rear of the Union troops were two brigades of Cleburne's infantry, Ross' and Fergurson's brigades of cavalry and about a thousand State troops, which had been sent up from below Lovejoy; closing in on the right were the remaining brigades of CLEBURNE's infantry. MAR-TIN'S and JACKSON'S divisions of cavalry were in rear of the left. A brigade of infantry and six pieces of artillery had been sent up from Macon, and were at Lovejoy Station. REYNOLDS' infantry, as before stated, was along the railroad in front. There were also twelve pieces of artillery which had been sent down from Atlanta. It thus seems that there were surrounding the Union troops five brigades of infantry, eighteen pieces of artillery, and six brigades of cavalry; in all, a force of twelve thousand men of the three arms. As before stated, KILPATRICK had the Second Division with four pieces of artillery, (at this time one disabled) and the Third Division with four pieces of artillery; in all 4,798 cavalrymen and seven guns.

Finding himself completely surrounded by such an overwhelm-

ing force, he called his division commanders together and instructed them to cut their way out, designating as the point to strike, an old deserted plantation. We see that up to this point, although his command was composed exclusively of cavalry and field artillery, the cavalry had been fighting almost entirely as infantry; but now his troopers were to be accorded the privilege of a cavalry charge in its true sense, and their sabers which had been allowed to rust in their scabbards during the expedition, were to be brought into requisition.

KILPATRICK, a cavalry general, remembering the mistakes which had been made on a former expedition for the same purpose, instead of scattering his troops, massed them. Colonel MINTY, with the Second Division was ordered to form on the right of the McDonough road and Colonel MURRAY with the Third Division on the left, both facing to the rear, that is, toward McDonough. One regiment of the Third Division had been left in the rear to hold in check REYNOLDS' infantry about the railroad cut. The Second Division was formed with Colonel MINTY's brigade in front, in line of regiments in column of fours, with regimental interval. The Seventh Pennsylvania on the right, Fourth Michigan in the center and the Fourth U.S. on the left. Orders were given Colonel Long to form his brigade in close column of regiments in rear of the leading one. There seems to have been either considerable confusion or disobedience at this point, for Long, in the charge, followed the leading brigade in column of fours and the Third Division, after a gap was made along the road, took up the march for McDonough. The ground over which the charge was to be made was cut up with washouts and crossed by two rail fences. The Confederates had formed in three lines about fifty yards apart and constructed barricades of fence rails. While these preparations were being made the troops were exposed to the fire of two batteries of artillery, one in front and one right front. When the charge was sounded the First Brigade bore down upon the Confederates, breaking through the fences and riding over the first and second lines, scattering and sabering the men and capturing their artillery. The third line broke and fled in confusion. The Confederate cavalry, it seems, did not wait for the contact, but fled before the charging columns reached them; the first two lines stood firm keeping up a continuous fire until ridden down by the cavalry. After the charge the Third Division took up the march through McDonough, the Second Division being instructed to cover the retreat. No effort seems to have been made to ascertain the number of killed and wounded, or to capture many prisoners, and most of those taken were allowed

to escape. Possibly Kilpatrick did not care to be burdened with them, as the sole object of the expedition was to destroy the railroad. It is, however, claimed by Vale, that at one time there were at least four thousand Confederates killed, wounded or prisoners in the Union hands. Colonel Minty says that at least eight hundred Confederates were sabered, and the Confederate battery and about six hundred prisoners were captured by the First Brigade.

The following is an extract from the *Memphis Appeal*, Atlanta, Georgia, early in September 1864, and is inserted as the only account of the affair at Lovejoy from the Confederate standpoint that I have been able to obtain. It will be seen that the account concerning the conduct of the Confederate cavalry differs materially from that of the Union commanders:

"The newspapers have lately been full of accounts of how MAR-TIN's division of cavalry was run over by the Yankees at Lovejov on the 20th ultimo. The writer was on the field on that occasion and in justice to the much abused cavalry states the facts in the matter: MARTIN'S division supporting the battery was formed on the Mc-Donough road. Ross' and Fergurson's commands on foot were in front and on each side of the battery, behind rail breastworks. A brigade of CLEBURNE's infantry was on the left of the road in three lines, the last one in a piece of woods. About one hundred yards in rear of the position of the battery, on the right of the road (east side) the State troops were formed in line. When the Yankees charged they came in a solid column, ten or twelve lines deep, running their horses and yelling like devils. They didn't stop to fire or attempt to keep any kind of order or formation, but each fellow for himself rushed on swinging his saber over his head. They rode right over Ross' and Fergurson's men in the center, and over and through CLEBURNE'S lines one after the other on the left. CLEBURNE'S first line, they say, tried to use their bayonets, but the Yankees cut them to pieces. After the Yankees had cut through all the other forces and captured the battery, MARTIN, seeing the field was lost, retreated in good order to the east and joined CLEBURNE's main body, and aided in the final defeat of the enemy on the McDonough road that evening, and pursued them to and through McDonough that night, recapturing nearly five hundred of our men which they took in the charge. The effort to arouse the people against MARTIN and his brave division is more disgraceful and demoralizing than the Yankees' charge itself, and should be frowned upon by all who wish well to our cause."

The command being under way toward McDonough, Colonel Long was directed to cover the retreat with his brigade. The Confederate troops from about Lovejoy coming up made a furious attack upon this brigade, the fight lasting nearly two hours. It was finally withdrawn with a loss of ten per cent. of the men killed, and its commander seriously wounded.

The Confederates followed for some distance but were held in check by the rear guard of Long's brigade, consisting of two regiments and two pieces of artillery. Both guns becoming disabled were withdrawn, and a heavy rain setting in, the Confederate attack ceased.

The column passed through McDonough about midnight and made a short halt at Walnut Creek about 2 o'clock A. M.; but by the time the rear of the command had closed up, the march was resumed and Cotton River was reached about 6 A. M. The heavy rain had so swollen this river that the bridge was carried away, necessitating a delay of about two hours until the stream subsided, after which it was crossed by swimming the horses, a number of which, with many pack animals, were drowned. It being impracticable to get the disabled cannon across, the wagon in which they were being transported was destroyed and the cannon buried, and the site marked as the graves of two soldiers of the Fourth U. S. Cavalry. A long and tiresome march was kept up until after dark, when the command bivouacked at Lithonia on the Augusta railroad, and here obtained the much needed rest and sleep, of which it had been deprived since its departure from Sandtown on the 18th.

On the following day, the 22d, the march was continued through Latimer and Decatur terminating at Peach Tree Creek, thus completing the circuit of both armies in five days. The casualties in the Second Division were: total, officers 14, men 192. I have not been able to get the same information regarding the Third Division.

General Sherman says in his "Memoirs," that on Kilpatrick's return he reported that he had destroyed three miles of railroad, etc., which it would probably take ten days to repair, but that trains were seen on the following day, the 23d, running into Atlanta, so he became more than ever convinced that cavalry could not or would not work hard enough to disable a railroad properly, and therefore resolved at once to proceed to the execution of his original plan. The "Rebellion Records" not being in print for this period, and not having access to any official documents, I have taken the accounts of this affair from different writers, all of whom agree in the main features of the raid, but vary somewhat in the details.

W. S. SCOTT, Second Lieutenant, First Cavalry.

A NEW LECTURE ON THE HORSE'S FOOT.

IN every stage of human progress the horse has been an important power, aiding independence and the development of commerce. The pony express carried mail from San Francisco to St. Joe with swiftness nearly equalling steam; Virgil immortalized the sound of the ringing hoof in song and rhyme; Ben Hur won the race with a team whose lineage records filled a trunk with ivory tablets; a Roman emperor built a palace for his horse; a legend tells us of a horse shod with shoes of gold; and Childeric, chief of the Salian Franks, of the lower left bank of the Rhine, father of Clovis, first king of France, is recorded as having shod his horse's hoofs with iron, 481 A. D.

We have developed the horse in nearly every way except the very important one of increasing the strength of his hoof. In fact the hoof is weakened whenever we attempt to protect it with iron in the present orthodox manner.

We have but to compare illustrations "A" and "B," to be convinced how completely our efforts fall short of their aim, and how crippling the results produced by persistence in the present practice.

The former "A," is a natural unshod foot which remains unaltered throughout life; the other "B," is a hopelessly contracted foot, the painful result of our ineffectual efforts to make the horse stronger and last longer by shoeing.

Lameness interrupts the horse's continued usefulness more frequently than any other weakness. We have hunted for the cause of this trouble in fast driving, hard roads, bad workmanship, worse shoeing—all in vain, and concluded that it is a constitutional defect more flagrant in some varieties of horses than others.

That a horse must be shod to be continuously serviceable in all localities is a fact taught by centuries of experience.

The natural hoof shown in illustration "C," taken from the Encyclopedia Britannica and "D," photographed from nature, admirably exhibit the order of the details we are about to examine.

Underneath the last bone—the bone of the foot1—of which the

tips are enfolded each by a blue cushion, we find the thick yellow plantar² cushion; beneath this is a thick pink tissue,³ the sensitive sole, and underlying this, the horny sole and frog ⁴ closing the horn box which constitutes the hoof.

I will point out the nature and relation of the principal details of the ground surface of the hoof, that we may instantly recognize any departure which another foot may present. Turn to "A" and "F"; measuring over all, the width is greater than the length.

The sole proper is crescent shaped and has a horizontal grain along which the scales separate when it becomes redundant. The wall and bars whose grain is up and down, enclose the sole proper as a continuous rim. At the heels the wall and bar make with each other a horizontal angle of eighty-four degrees for the outer, and seventy-six degrees for the inner heel.

The bars incline toward each other in the triangular space between the heels, with a pitch from the vertical of sixty-two and sixty degrees for the outer and inner respectively, and the ridge space between them is filled in by the frog. See section "D."

The hoof that is never shod retains the relation of parts pointed out as constituting the ground surface of the foot "A" or "F"; but as soon as this foot is shod in the customary manner, changes set in, altering it thus:

The horizontal angle between wall and bars becomes less; the inclination of the bars toward each other becomes less also—they tend from this nearly horizontal position to become upright; the length of the foot becomes greater than the width, and the broad heel becomes narrower and grows higher in spite of the effort to keep it cut down. See "B."

After seven or eight years of constant shoeing, and work like that done by the car and cab horse, the hoof becomes like that in "B," in which the bars have become vertical, and thus ceased to be an element of safety and strength.

Having lost their broad, nearly horizontal, flexible position, they now stand upon edge, pressing into the quick at every step, and are a source of torture. Indeed, any day we can see a horse standing patiently in the street, easing and significantly pointing one foot and then changing off to point the other.

Take such a horse to the smith's, and the smith will declare, after examination of the hoof, that there is nothing the matter with the horse. Nevertheless he is suffering with what may be aptly described as an aggravated case of "ingrown toe-nail."

· When barefooted, the entire plantar surface reaches the ground,

but when shod, the wall only reaches the ground by means of the shoe; the rest, i. e., the bars and frog, is held above the ground and is thus without direct point of support.

Let us examine the track of the bare foot made in half hardened mud or plaster and ascertain whether the weight carried by it is evenly or unevenly distributed; then what part of the plantar surface carries the most.

A glance at "E" shows us that the load is unevenly distributed, for parts of the plaster have been made very dense and smooth by pressure, and contrast strongly with the rest, which carried less weight and so remained rough and pitted. The imprint of the bars shows that they carried the greater weight, which is astonishing in the light of the usual shocing practice, for they are ordinarily cut away and never permitted to rest on a firm support. The transverse section of the hoof ("D") enables us to appreciate the strength and carrying capacity of the bars, for in this they form an arch keyed by the frog.

We know that the greatest wear and tear are at the place where the greatest pressure and strength are exerted; and from this inspection of the track we deduce the following rules for guidance in shoeing:

We must not cut away the bars, neither leave them without solid support in mid-air, but we must include them in the weight bearing surface, and give them shoe bearing the same as the wall. To obtain this it is only necessary to widen the iron at the proper place, so as to spread over the bars as well as the heel.

My task ends with this recommendation: to shoe the bars as well as the wall. This is not an innovation, as the barefooted horse usually carries his weight on the bars and the point of the toe; for the quarters and sides chip and break away, while the bars, on account of obliquity, flexibility and location, are subject to wear only, as is clearly shown in "F." It is the privilege and duty of every lover of a horse to verify the foregoing facts, provided his experience does not already attest them.

Let us now carry our investigation to the iron surface which replaced the ground in the immediate touch with the plantar surface of the shod hoof.

Here is a well worn shoe "G" with large heel marks.

The estimate of size, depth and outline of the marks can be gained by seeing and feeling. We discover that the sides slope unequally; the steeper is found toward the outside of the shoe, and the gentler slope extends toward the inner side. This shows that the heel which, as a rule, makes an angle of forty degrees with the ground, and approaches the horizontal still nearer while put forward in taking the step, glides along the top of the shoe in the direction corresponding to the inclined position of the horn of the heel.

The mark is a fact. The moving or yielding of the horn is also a fact, for it cut the mark, and, as this mark is deeper near the outer edge, and, as the direction of the horn is forward, the yielding must be forward and under.

Again, let us examine the nail-holes at the quarters and those next to them. We find that the rectangular form of the hole has been destroyed on the inner and forward side by the rubbing of the nail. See "G." This shows that at the quarters the horn springs or yields inward. These marks written on the iron, tell us then in positive terms that at every step the hoof yields under and inward, being firmly compressed with every effort made by the horse in progression.

We have already seen that the bars form an elastic arch of horn closed at the top by the frog. See "D." That this arch yields at every step is proclaimed by the mark on the shoe "H," where the base of the arch rested. The mark is there, so the yielding must have taken place. This yielding of the bar may be easily reproduced by a light card-board model of the hoof.

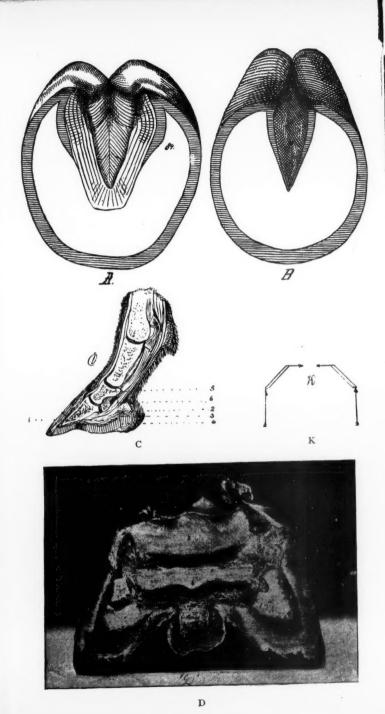
When such a model is subjected to a gentle blow, or a moderately exerted pressure, we shall see the heels yield forward and under, the quarters spring in, and the bars take up a compensating displacement which makes them nip the frog with a shearing action. The combined action of the bars and frog tends to dissipate all blows into horizontal components. See Figure "K." Now we all know that a horse will go lame very soon with a "picked up" pebble between frog and bar; for this pebble so placed, sends the blow of every step directly to the quick by spreading the arch apart at the summit.

We understand now why the hoof with unimpaired bars can stand the temporary loss of the external frog, through dry thrush or atrophy, and not be painful or lose strength.

On the other hand, in the contracted foot, in spite of scrupulous cleanliness and careful nursing, the frog will wither because deprived of the stimulating action of the bars.

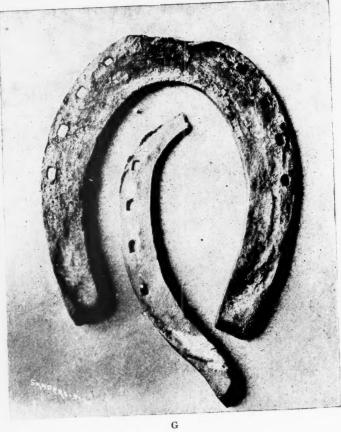
THE PRACTICAL TEST.

Horses in Troy and Albany, New York, have been shod agreeably to the foregoing principle for nearly two years now, with satisfactory

















results. The shoe "I" is shaped to satisfy the principle, and in addition possesses length of metal for shoeing with calkins.

On the worn shoe "H," the bar has written as emphatic a mark as the wall has. No argument is therefore needed to prove that a part of the plantar surface of the foot which records its usefulness so distinctly ought not be cut away; and, furthermore, no horse can be deprived of its use without impairing the strength and value of the animal.

The practical use of the advocated principle will extend the endurance of shod hoofs so as to be coëval, like the barefooted hoof, with the natural length of the horse's life.

H. J. GOLDMAN, First Lieutenant, Fifth Cavalry.

AN UNEXAMPLED RIDE—FROM THE PACIFIC TO THE BALTIC ON A SINGLE HORSE.

THE results of such a bold and hazardous journey are very instructive and therefore it is not astonishing that Sotnik* D. Peschkor has attracted the attention of all, not only in Russia but throughout the whole of Europe.

The government, fully recognizing the merit of Sotnik Peschkof, who undertook on his own account and at his own risk this unexampled journey, rendered a triumphal reception to this young officer upon his entering St. Petersburg. Two regimental bands and a squadron of Cossacks under the command of General Grekof (commander of the Life Guard Attaman Regiment) were sent to meet him. Besides this, the local military administrations arranged receptions for the rider as he passed through the towns of Tomsk, Omsk, Fümen, Perm, Kasan, Nijni-Novgorod, Moscow, Novgorod and Valdai. The cavalryman and his horse were weighed at several of these places.

Sotnik Peschkof brilliantly verified the almost legendary endurance, strength and boldness of the Russian soldier and the Russian cavalry horse. It is true that the marches to Paris in 1813, and those across the Balkans in 1877, and even the journey of Asseef on horseback to Paris last year sufficiently demonstrated the courage, perseverance and endurance of Russian military men and horses; but Peschkof, if he did not prove more, at least clearly demonstrated the valiant audacity and iron firmness of a Russian Cossack in struggling with cold, famine, dangers and apparently insurmountable obstacles.

The journal "Novoié Vremja" rightly says: "That from a cavalry point of view the journey of Sotnik Peschkof is absolutely remarkable and surpasses, probably, the excursion of Cornet Asseef to Paris, who, however, made greater speed, being provided with two horses."

^{*} Lieutenant of Cossacks

To know how to save the strength, both of horse and rider over such an enormous distance speaks for itself; and it is not at all remarkable that, everywhere, military men honor Peschkof as a welcome guest.

By passing the 5400 miles he showed: First, The possibility of traveling day by day for more than half a year on a single horse, with halts not longer than a night; Second, That a horse, well cared for, can go continuously 193 days without losing anything in weight and without becoming fagged or sick; Third, The possibility of making marches during hard winters with a temperature of many degrees below zero, through snow-drifts, snow-storms, etc.; Fourth, To the Military Department, a direct route from Blagovestchensk to St. Petersburg, indicating all the advantages and defects of the road; and Fifth, By personal experience, that another "impossibility" has been rendered possible.

THE START FOR THE JOURNEY.

The cold and severe Siberian winter had just begun. One evening in the far distant town of Blagovestchensk, (situated on the river Amoor) which the post, from St. Petersburg, requires two and onenalf months to reach—there was an assembly of officers in consequence of the news respecting the journey of Cornet Asseef to Paris on two alternating horses. Much was said for and against the object of such an excursion; many jokes and jests were heard. The month of November came on and the first few lines relative to ASSEEF's journey arrived at Blagovestchensk after the close of the Paris exhibition and when Asseef was back at St. Petersburg. From Omsk, the Siberian center, to Blagovestchensk there are over 3300 miles of the most dreadful road without any proper means of communication. Here, one may find hundreds of miles without habitations, thousands of acres of forests and waste grounds; in some places roads, in the shape of tunnels, are cut through the thickest forests in which, for a distance of many miles, no daylight can be seen. Almost the entire population of these forests is composed of wild beasts and fugitive convicts.

"According to my idea, there is no glory in making a journey to Paris; I intend to undertake a trip to St. Petersburg on my 'Seri' (gray)" remarked Рессиков, who was at the assembly when the first news of Assees's journey arrived at Blagovestchensk.

"What a joker that Peschkof is," laughed his comrades.

"I am not joking; I seriously intend to take a ride to St. Petersburg," replied Резсиков.

- "Is it possible to make 5400 miles on one horse over such roads as we have?"
- "I think I can, and that is why I want to try; and why not? On my 'Seri' I often make over fifty miles for pleasure, and at the end of the ride the horse seems as lively as when first brought out of the stable."
- "And here, you have 5400 miles! Fifty miles we all often make with ease."
- "Nonsense, gentlemen! The greater distances can also be made in a reasonable time."

The longer the conversation continued the surer Peschkof became of the possibility of accomplishing the journey, and three days afterwards he made application to his commander for six months leave.

- "Why do you want so long a leave?" demanded the commander.
- "I wish to ride to St. Petersburg on my horse."
- "What?"
- "I should like to try, for I think I can do it."
- "Now, at the severest time of winter! But do you know what awaits you in these wild deserts with snow-storms and the temperature at present many degrees below zero?"
- "I know everything; I am not afraid and, with God's help, will realize my intention."

Peschkof was inexorable. The commander did not refuse him the leave, being of the opinion that the sotnik would change his mind on the road and would surely return from Irkutsk.

Three days were taken for preparation and early on the morning of November 7th, Sotnik Peschkof, after the "Te Deum" in the church of Blagovestchensk, jumped into his saddle and started off on his ride to St. Petersburg.

The day promised to be severely cold but Peschkof was so lightly dressed that one might have supposed that he was going to take a ride around the town.

The farewells were of a very hearty, cordial character; all the officers with their families, the population, and even the soldiers, accompanied their bold Siberian fellow countryman down to the gates of the town, where Peschkof bowing on both sides, gathered his reins and put his "Seri" into a full trot.

"I will write my will in St. Petersburg," laughed Peschkor in sending a last farewell to his friends.

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PERSONALITY, BIOGRAPHY AND LIFE OF SOTNIK PESCHKOF.

Who is Peschkof? asked every one when the first news of his journey arrived at St. Petersburg.

Peschkof is a Cossack officer and that is all; but, in examining him quite closely, we see an iron will and character; he is deeply religious. He is an Amoor Cossack by origin, native of the Albasinsk "stanitza" (Cossack villages), hardened by the rough nature of Siberia. He did not prepare himself for military service, but when a boy entered as telegrapher at the Upper Amoor Mine Telegraph Station. The quiet, peaceful service of a telegrapher did not satisfy the stirring and eager disposition of the present hero.

"I want to be a Cossack officer," said he to himself, and in five years realized his dream. With great difficulty manuals and elementary books were received, and, in two years, he prepared himself, without any help of others, so well that he easily passed the examinations for volunteer and entered the Irkutsk Military School. Three years were passed in studies and Peschkof, having admirably finished

the full course of studies, was promoted to the grade of sub-cornet, and three weeks later cornet. At present he is a sotnik.

The figure of Peschkof is not that of an athlete; he is small in stature, robust, with a dark, sunburnt face, of rather irregular features, but very sympathetic.

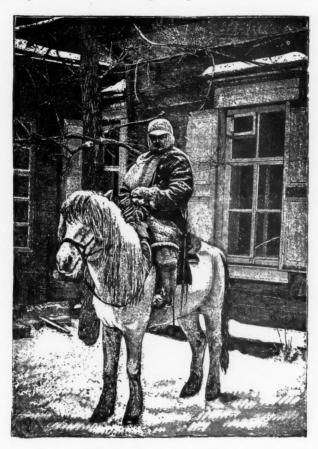
His costume consisted, besides the ordinary uniform of a Cossack officer, of a large leather coat made in military fashion, with lieutenant's epaulets, of leather trousers with yellow stripes, and high hunting boots. His head was covered with a high "papacha," (head-cover of Cossacks) made of sheep skin, the wool outside, trimmed with silver braid; he wore the papacha, like all the Cossacks, on the right side so that the right ear was quite covered. A Caucasian cowl made of camel's wool completed the costume; a Circassian saber, with round silver handle, hung on the left side under his arm, and on the right side a small traveling bag and a "nagaïka," (Cossack whip) at the end of whose lash is secured a piece of something heavy, usually a piece of lead.

During very severe cold, Peschkof wore also a jacket of Japanese silk, the inside of which is down and wadding, and a small round fur cap with folding visor and lappets, such as Siberian miners wear. During hard snow-storms, his hands were covered with sheep skin mittens and his legs with woolen socks and boots made of deer skin, (the hair inside) generally called by the Siberians "unti."

SOTNIK PESCHKOF'S HORSE.

Its exterior qualities are in no way remarkable. The horse is of the local breed, purchased by Sotnik Peschkof two years ago from a Cossack of the Konstantinof Stanitza, for seventy roubles (about forty dollars). It is a light grey, nearly white, nine years old, very docile, twelve hands three inches high; its step is long, even, with an ambling gait, the speed of which is wonderful for the size of the horse. In appearance it seems to be an ordinary, plain and clumsy little animal; all that is remarkable in it is a rare strength in its legs and good pasterns and hoofs; its back is a little humpy, without any traces of saddle bruises, notwithstanding the 5000 miles which it made under the saddle. The rider himself looked after the horse. cleaned it every day and gave it food and drink. During the progress of the journey he gave it more and more oats so that, on arriving at Omsk, it had thirty pounds of grain a day or twenty-two pounds more than when it started; the hay allowance was fifteen pounds. It preferred snow to water that was the least tainted or stagnant. The average rate per day, including the twenty-four days of stoppage

at towns lying on his road, was more than thirty-seven miles; there were days when he made forty-six miles, and once near Kolyvani, even fifty-six miles. The average rate per hour was about six miles.



SOTNIK PESCHKOF AND HIS HORSE.

The following description of its gait was given by Mr. Proksaef, a well known Moscow correspondent:

"Sotnik Peschkof's horse has a remarkable walk; we could keep up with him only by running. After four or five miles, when the rider jumps off of it and runs about two-thirds of a mile, the walk increases and it is hard to overtake it even at a run."

The saddle is an ordinary Cossack saddle, possibly heavier than

the American cavalry saddle, but did not at all rub the horse's back. The saddle outfit was very small, consisting of a small valise and two bags containing the rider's uniform, two changes of underclothes, reserve horse-shoes, nails, hammer, file, hoof knife and tongs for horse-shoeing. No provisions at all were carried, not even tea or sugar; Peschkof bought these at stations where he passed the night. All the luggage, including his winter clothes, weighed fifty-four pounds; he himself weighs only one hundred and twenty-six pounds, therefore the horse carried one hundred and eighty pounds.

The strength of the "steppe" horses was long ago proved, but no one dared say that they were capable of making such a long and hard journey. The reputation of our cavalry, regular and irregular, is now by "Seri" more clearly established than ever before.

HOW PESCHKOF RODE.

When once started, he never stopped elsewhere than at the places where he had fixed before-hand halts for the night. It once happened, when leaving Vladimir, he did not have time to take his lunch so went on quite hungry. In this manner he went from place to place without stopping, passing hamlets, villages and towns, if they had not been previously selected for night halts. According to him to "stop" meant to loosen the girth, to feed the horse and give it water, and this he did not do more than once a day. In such a way he rode 5478 miles, and on the one hundred and ninty-third day reached the end of his journey. He always rose at seven in the morning and retired at nine in the evening.

"I would take no luggage or provisions with me," said he, when I met him on the day after his arrival in this town, at the house of Mrs. Annie Repenak, wife of a well-known doctor of St. Petersburg, "it was quite impossible to do otherwise; the provisions were purchased at the stations where I passed the nights. Yes!" added he, when recollecting his journey, "I passed many dreadful hours; at a temperature many degrees below zero, with snow-storms, tired, broken down altogether, when arriving at places where I hoped to pass the night, every one often refused me hospitality, and doors were closed upon me with such words as 'I cannot let you pass the night here; God knows who you are.' With such receptions it is not to be wondered that I passed many days in hunger."

The first section which Sotnik Peschkof passed was 386 miles, to the town Albasin, situated on the left bank of the Amoor river (53° 23' N. latitude and 141° 57' E. longitude). After this first section the horse was in splendid condition and not tired at all.

The second section was a distance of 323 miles, (one of the most difficult, and severely tested the strength and will of the sotnik) to Pokrovsky, situated at the junction of the rivers Schilka and Argunin.

The last days of November came on; the weather was cold, with enormous snow-storms every day; it was difficult to move and the rider hardly made twenty-six miles a day, notwithstanding that he followed the post road which was altogether lost in deep snows in which "Seri" seemed to founder.

The third section was a distance of 390 miles to Stretensk; this stage was also very hard on account of the cold of December; the population here is very sparse; often in a ride of ten to thirteen miles no house can be found. There were passages of twenty to twenty-six miles along narrow paths cut through dark forests.

The fourth section of 273 miles, the journey to Verchneudinsk, on the rivers Uda and Selenza, was also difficult; he had already passed 1326 miles, the horse was in the same admirable condition.

The fifth section to Irkutsk, a distance of 295 miles; he arrived here in January and, on the next day after his arrival, he fell ill and was compelled to remain two weeks on account of "la grippe," (influenza).

The sixth section to Nijneudinsk, of 321 miles, was passed during the most severe January (or Stretenski as they are called here) colds.

The seventh section to the town of Atchinsk, on the river Tchulima, a distance of 456 miles, was one of the longest and was made in sixteen days.

The eighth section to Tomsk, 257 miles, was made with the same difficulty.

The ninth section to Omsk, a distance of 581 miles; he arrived there on the 27th of February, or 113 days after his start, having made 3252 miles.

Here, by order of the commander of the military district, the horse of Sotnik Peschkof was examined; its body looked well, the back was in perfect order without bruises, only a small quantity of hair near the hoofs on the left feet seemed to have been rubbed off.

The tenth section, a distance of ninety-one miles to Tyukalinsk, (government of Tobolsk) was passed easily in three days; he stayed half a day in the town and then went on.

The eleventh section, very small, of 126 miles to Tschim on the left bank of the river of the same name, was made in four days with more comfort than before, for the dreadful storms and cold had ceased.

The twelfth section to Yalutorosk, on the river Tobola (56° 39' N. longitude and 83° 59' latitude) a distance of 148 miles, was made in six days during beautiful weather which, however, was not good for the horse.

Spring commenced and "Seri" was getting tired; nevertheless the rider did not want to make any more long halts, wishing to finish the journey in as short a time as possible.

The thirteenth section to Tyumen of fifty-four miles, where he arrived on March 27th, was made comfortably; "Here" said he, "it smelled Europe," and the road was thenceforth without danger; here he stopped only a few hours and then went on to Perm where he arrived on April 1st.

The fourteenth section of 301 miles, from Perm to Kasan, parallel to Kama river, through Vjatka government with its well known forests, was less populated than the Ural, but was passed without misfortune; this passage is the most difficult in all European Russia as there are hardly any roads. The rider arrived at Kasan on April 12th.

On April 17th he arrived at Moscow, not stopping at Vladimir and other towns situated between Kasan and Moscow. At Moscow he was stopped till May 4th and then continued his journey to St. Petersburg, passing by Valdoi, Jver, Novgorod, Lüban, etc.

When the rider was approaching Lüban he was met by one of the lieutenants of the Imperial Guard, Cossack Regiment, who, at fifty-three miles from St. Petersburg, informed him that the commander of said regiment, as well as the officers, would be pleased if he would accept their hospitality and stop at the quarters of the regiment during his residence in St. Petersburg; which invitation Sotnik Peschkof accepted.

The last halt of Peschkor before the end of the journey, was made in Josns, twenty miles from St. Petersburg, where he arrived on May 18th.

Here, when unsaddling his horse, he heard a band approaching the village; on going down the road he met a beautiful cavalcade of officers of the Cuirassier Imperial Regiment, accompanied by their commander, who met Peschkof with the following words: "Sotnik Peschkof! In the name of all, both officers and soldiers, of the Life Guard Cuirassier Regiment of His Majesty, I am glad to meet you as an unexampled cavalry officer. You have once more proved that nothing is impossible for a Russian Cossack; your name will never die in the history of Russian Cavalry! Good health to Sotnik DMITRI Peschkof!" "Hurrah! Hurrah!" was the reply of all those pres-

ent. Then addressing himself to the soldiers who accompanied the cavalcade, the commander continued: "Soldiers! Before you stands a Cossack from the far Amoor regions; he is Sotnik Peschkof of the Amoor Cossack Horse Regiment; you must never forget the name of this officer who, on one horse, has made more than 5000 miles from Blagovestchensk to St. Petersburg." "Hurrah!" was the reply of the bold Cuirassiers, and the band played the air of the Meeting March.

Early on the morning of May 19th the sotnik arrived at St. Petersburg, where he was met by a large crowd and many local regiments; this day seemed to be a holiday as many shops were closed, the employés of which went down to meet the rider.

On May 22d, he was invited to a dinner offered him by the Cavalry School, the chief of which, together with the assistants, presented to him a silver cup with his name engraved on it.

On May 28th he had the honor to be presented to the Emperor who knighted him with the cross of St. Anne, Third degree. On the same day, the society for the Protection of Animals presented him with a gold medal, and a diploma as honorary member of said society.

On June 6th, having been informed that he would be attached for several years to the Cavalry School of St. Petersburg, he, being very religious, as has been said, went away to Jerusalem to pray.

A. N. KOVRIGIN.

St. Petersburg, Russia, August 7, 1890.

NEW DRILL REGULATIONS FOR CAVALRY, U. S. ARMY,

The Tactical Board, 515 Walnut Street, Leavenworth, Kansas requests comments and suggestions.

Armament of Trooper for Garrison Duty, Dismounted.

51. Complete armament: Carbine, pistol and saber.

For drill and inspection: As may be directed.

The saber belt will always be worn with full dress.

For duty out of rank, as orderly, witness, etc., saber and saber belt.

Full dress: Carbine (without sling) and cartridge box.

Undress: Carbine (without sling) and cartridge belt; or pistol and cartridge belt; or saber and saber belt, with or without pistol.

The saber is not worn when in rank on dismounted duty, except for saber drill, inspection of saber, or on duty that does not require marching.

Spurs are not worn on dismounted duty.

The carbine sling will be worn for drill when ordered.

Armament of Trooper for Garrison Duty, Mounted.

354. For drill and inspection: As may be directed.

The saber belt is always worn with full dress, the cartridge belt with undress.

The saber is attached to the left side of the saddle, unless otherwise ordered.

Full dress: Saber and saber belt; the pistol and cartridge box when ordered.

Undress: Carbine (with sling), cartridge belt and saber; the pistol when ordered.

The spurs are worn on all mounted duty, except when otherwise ordered.

EVOLUTIONS OF THE REGIMENT.

870. The regiment is supposed to consist of three squadrons, of four troops each. The instruction prescribed is applicable to a less number of squadrons, composed of a less number of troops, squadron commanders making the necessary allowance in distance.

871. In whatever direction the regiment faces, the squadrons are designated from the right in line, and from the head in column, first squadron, second squadron and third squadron. The troops are designated by the colonel according to their squadron and position in the squadron; as second (or such) troop, first (or such) squadron; etc.

If in two lines, the squadrons of each line are designated from the right in the first line, first and second; in the second line, third.

872. All movements should be executed at the trot, unless the colonel commands or signals walk or gallop.

The Colonel.

873. The colonel is the instructor. In line, and in line of columns, he takes post sixty yards in front of the center of the regiment; in line of masses, thirty yards in front of the center of the regiment. In column, sixty yards, and in column of masses, thirty yards from the center of the column on the side of the guide. Generally, he should be where he can best superintend his regiment and make his commands heard.

The Lieutenant-Colonel.

874. In line, in line of columns and in line of masses he takes post thirty yards in rear of the center of the regiment. In column, he is abreast of the center and on the side opposite the guide, thirty yards from the flank.

During field movements, the duties of the lieutenant-colonel are to assist the colonel, as the latter may direct, and he is not restricted to any particular post.

The Squadron Commanders.

- 875. Each squadron is commanded by a major.
- 876. The major takes post as in the School of the Squadron, except in line of masses, but much latitude must be allowed in regard to his position. He must ride wherever he can best hear the colonel's commands, make his own heard, and superintend his squadron.
- 877. Each major gives the commands necessary to insure the execution of movements by his squadron at the proper time.
- 878. Unless otherwise ordered, latitude will be allowed the squadron commander in maneuvering his squadron into position. Methods given in the text should be followed, unless circumstances, such as the configuration of the ground, etc., suggest shorter and safer ones to accomplish the object of the movement, when he should not be required to comply literally with the text, so long as he uses movements prescribed in the School of the Squadron, e. q.: In the maneuvers for

forming line from column of fours, where it is prescribed that the squadrons shall move opposite to their places in line by obliquing by the heads of columns, the major may move the squadron in column of fours, and *vice versa*.

879. A squadron may stand at ease (Par. 315) while awaiting the completion of a movement by the other squadrons.

Staff and Non-Commissioned Staff.

880. The staff officers, sergeant-major and chief trumpeter accompany the colonel; the adjutant rides on his left, the other staff officers are in line, in the order of rank from right to left, six yards in rear of the colonel and adjutant; the sergeant-major, chief trumpeter and orderlies, three yards in rear of the staff officers.

In line, the non-commissioned staff except the sergeant-major, and the regimental non-commissioned officers except the chief trumpeter, are in one line in the order of rank, the senior on the right, abreast of the rank and six yards from the left flank; when the regiment faces about, they turn about individually, but do not change to the other flank. In column, they are six yards in front of the chief of the leading sub-division or twelve yards in rear of the rear sub-division, according as the column was formed toward or away from their flank. In marching by the flank of sub-divisions they are abreast of the nearest sub-division.

Except the adjutant and sergeant-major, the staff, non-commissioned staff and regimental non-commissioned officers may be excused from the regimental maneuvers other than ceremonies.

The Band.

881. In line, the left of its front rank is sixteen yards to the right and in line with the rank of the first squadron.

In column, it is sixteen yards in front of the officers of the leading sub-division.

The band may be excused from regimental maneuvers, or it may be assigned a position on the ground.

The Guard of the Standard.

882. The guard is posted as the left four of the center or right center troop of the center squadron, or of a single squadron; if there be but two squadrons it is posted as the left four of the left troop of the first squadron.

Route Marches.

883. In route marches, the colonel is at the head of the column accompanied by the staff, except the surgeons and quartermaster, and

by the non-commissioned staff, regimental non-commissioned officers and orderlies.

The lieutenant-colonel and the surgeons are in rear of the column, or as the colonel may direct.

The quartermaster is with the train.

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The colonel may direct the standard and its guard to march at the head of the regiment, in rear of the orderlies.

General Rules for Command.

884. The commands of the colonel may be given by message.

In the evolutions of the regiment, the lieutenant-colonel, if commanding a separate line, and the majors unless otherwise directed, repeat the commands of the colonel. The preparatory command of the colonel is repeated as soon as given; each major then adds such commands and causes his squadron to execute such movements as are necessary to the execution of the general movement.

The colonel may preface the commands for each movement by the command: Attention.

When the regiment is in more than one line, if a movement is to be executed by one of the lines, first line, second line or third line is specified in the preparatory command of the colonel; the squadron commanders in the designated line repeat the commands of the colonel.

Where the formation will admit of the simultaneous execution of movements by squadrons, the colonel may have them execute the movements prescribed in the School of the Squadron by prefixing the command: Squadrons, to the commands therein prescribed.

The colonel may designate a squadron to execute a separate movement by prefixing the command: (Such) squadron, to the commands prescribed in the School of the Squadron.

Where the formation will admit of the simultaneous execution of movements by troops or platoons, the movements are executed as in the School of the Squadron, the colonel giving the commands prescribed for the major, except that in announcing the guide, in line or in line of columns, he commands: (Such) the base squadron.

To Form the Regiment.

885. The regiment is formed by squadrons according to the principles for successive formations. It may be formed in line, in line of platoon columns, or in line of masses, at the discretion of the colonel.

It may also be formed in separate lines, or in echelon in any combination of the above formations.

When forming, the squadrons are posted in line from right to left in the order of the rank of their squadron commanders present, the senior on the right; or are posted in such order as the colonel may direct. A squadron whose major is in command of the regiment retains its place.

The interval between squadrons in line is sixteen yards.

To receive the regiment, the colonel takes post facing the center; the staff, non-commissioned staff and regimental non-commissioned ficers then take their posts.

The adjutant indicates to the adjutant of the base squadron the point of rest and the direction of the line, and takes post about thirty yards in front of the center of the regiment.

The formation completed, the adjutant commands: 1. Squadrons, 2. Attention, 3. Draw, 4. Saber, 5. Present, 6. Saber, turns to the front, salutes the colonel and reports: Sir, the regiment is formed.

The colonel returns the salute with the right hand, directs the adjutant: Take your post, sir, and draws saber.

The adjutant moves at a trot or gallop and joins the colonel, passing by his right and rear.

To Rest and Dismiss the Regiment.

886. The regiment is rested and called to attention as in Par. 315, substituting squadrons for squad in the commands.

To dismiss the regiment, the colonel commands: Dismiss your squadrons.

Each major conducts his squadron to its parade ground where it is dismissed as prescribed.

To March in Line, or Line of Columns

887. The colonel may designate the point of direction (Par. 75). Being at a halt: 1. Forward, 2. Second (or such) the base squadron, 3. March.

The guide of the designated squadron selects new points on the ground as he advances; the other squadrons regulate their march upon the base squadron so as to preserve the intervals and the alignment.

The major of the designated squadron commands: Guide center; majors of squadrons on its right command: Guide left; majors of squadrons on its left command: Guide right.

888. In changing front, or in obliquing, the squadron on the flank toward which the movement is being made, is the base squadron for the time being.

To Face the Line to the Rear.

889. 1. Face to the rear, 2. Fours right (or left) about, 3. MARCH. Each major halts his squadron as the fours unite in line.

To March the Line to the Rear.

890. 1. Fours right (or left) about, 2. MARCH, 3. (Such) the base squadron.

To Halt the Regiment.

891. Being in march: 1. Squadrons, 2. Halt.

Alignments.

892. Being in line at a halt, to give a general alignment, the colonel selects a base troop, posts its guidon and principal guide opposite the point of rest in the desired direction, and commands: 1. Guides on the line, 2. On the center (right or left), 3. Dress.

At the first command, the guidon and principal guide of each troop post themselves as in forming the squadron, taking care to preserve the intervals.

At the command dress, each squadron is dressed as in Par. 716.

If a squadron be at a considerable distance from, or in front of the position it is to occupy, its major will, at the first command, move it into proper position for dressing.

Being in Line, to March by the Flank.

893. 1. Fours right (or left), 2. MARCH.

Being in Line at a Halt, to Break into Column of Fours from the Right or Left, to March to the Left or Right.

894. 1. Column of fours, 2. Break from the right (or left) to march to the left (or right), 3. MARCH.

The first squadron executes the movement (Par. 720); the other squadrons follow successively at the command of their majors, each seventeen yards in rear of the one preceding.

895. The regiment in column of fours, forms line to the right or left, advances, obliques, changes direction, and marches to the rear as prescribed for the squadron.

896. The movements from column of fours are explained for execution on the march, but they may be executed from a halt.

Successive Formations.

897. In successive formations of the regiment, the completion of the movement should find the regiment halted.

The adjutant or sergeant-major of each squadron precedes it to indicate its point of rest.

The guidon and principal guide of the base troop of the base squadron are first established.

The guidon and principal guides of the leading troops of the rear

squadrons are established on the general line, the nearest guidon being at the proper interval from the flank of the squadron next preceding.

898. When in two or more lines or in column of squadrons, the normal distance is squadron front and seventeen yards; this may be increased or diminished, the colonel adding to his first command: At (so many) yards distance; or the colonel may send orders to the commanders of the second and third lines specifying the distance; or may send a staff officer to indicate the point of rest.

When in two lines, the second line in all maneuvers preserves its position relative to the first and conforms to its movements.

Being in Column of Fours, to Form in Two Lines to the Right or Left.

899. 1. In two lines, 2. Fours right (or left), 3. Third (or such) squadron, second line, 4. March.

The first and second squadrons form line to the right and halt. The third squadron inclines to the left until it gains the required distance, when it resumes the original direction, and is formed in line to the right and halted with its center in rear of the center of the first line.

Being in Two Lines, to March in Column of Fours.

900. 1. Column of fours, 2. First Line, 3. Fours right (or left); or, 3. Right (or left) forward, fours right (or left), 4. March. The squadron commander of the second line adds: 1. Fours right, 2. March, or breaks into column of fours to the front (Par. 785) in time to follow the preceding squadron at the proper distance. The squadron is marched by the shortest line to its place in column.

Being in Column of Fours, to form On the Right or Left into Line.

901. 1. On right (or left) into line, 2. MARCH.

The leading squadron executes on right into line; each of the other squadrons at the commands of its major, executes the same movement when its leading four has passed thirteen yards beyond the left flank of the squadron preceding.

Being in Column of Fours, to Form in Two Lines on the Right or Left.

902. 1. In two lines, 2. On right (or left) into line, 3. Third (or such) squadron, second line, 4. MARCH.

The first and second squadrons execute the movement as in Par. 899. The third squadron inclines to the left until it gains its distance (Par. 896), when it resumes the original direction, and forms on right into line so as to be in rear of the center of the first line.

Being in Column of Fours, to Form on Right or Left into Line by Squadrons.

903. 1. On right (or left) into line by squadrons, 2. MARCH.

The first squadron is wheeled by fours to the right and is halted after advancing thirty yards; each of the other squadrons marches beyond the one preceding, is wheeled by fours to the right at its proper interval, and is halted on the line.

Being in Column of Fours, to Form in two Lines, on the Right or Left, by Squadrons.

904. 1. In two lines, 2. On right (or left) into line by squadrons, 3. Third (or such) squadron, second line, 4. March.

The first and second squadrons execute the movement as in Par. 903. The third squadron inclines to the left until it gains its distance, when it resumes the original direction, and forms line to the right in rear of the center of the first line.

Being in Column of Fours, to Form Front into Line.

905. 1. Right (or left) front into line, 2. MARCH.

At the first command, the majors of the rear squadrons command: Column half right.

At the command march , the first squadron executes $\mathit{right}^t\mathit{front}$ into line.

Each of the other majors so marches his squadron that when the head arrives opposite its point of rest, it shall be at least troop distance and thirty yards in rear of the line, then changes direction half left, and when thirty yards from the line forms it right front into line.

In forming front into line, the majors of the second and third squadrons may march their squadrons diagonally toward their positions, by the heads of troops, e.g.: The majors command: 1. Troops, 2. Column half right (or half left) (Par. 879).

Being in Column of Fours, to Form Front into Line, Faced to the Rear.

906. 1. Right (or left) front into line, faced to the rear, 2. March. The first squadron executes right front into line faced to the rear; the others are marched toward their points of rest and formed right front into line faced to the rear on the left of the first.

907. Front into line and front into line faced to the rear may be executed on the rear of the column, by first wheeling about by fours and then using the means already explained.

Being in Column of Fours, to Form Front into Line on the Head of a Rear Squadron.

908. 1. On third (or such) squadron, 2. Right (or left) front into line, 3. March.

At the second command, the major of the first squadron commands: 1. Fours left about; the major of the second: Fours left.

At the command march, the third squadron executes right front into line. The second squadron marches in line until it has cleared the left flank of the third squadron by eighteen yards, when the major wheels it by fours to the left, and commands: 1. Right front into line, faced to the rear, 2. March.

The first squadron wheels about by fours, upon the completion of which, the major commands: 1. Column half-right, 2. MARCH, and marches his squadron so as to form it right front into line, faced to the rear, on the left of the second.

909. Front into line on the second squadron is similarly executed; the first squadron then forms as prescribed for the second (Par. 908); the second and third squadrons execute right front into line (Par. 905).

Being in Column of Fours, to Form Front into Line, in Two Lines.

910. 1. In two lines, 2. Right (or left) front into line, 3. Third (or such) squadron, second line, 4. March.

The first and second squadrons execute right front into line (Par. 903). The third squadron inclines to the right and forms right front into line, in rear of the center of the first line.

Front into two lines faced to the rear may be executed according to the same principles. The second and third squadrons form front into line faced to the rear, forming the first line; the first squadron forms line faced to the rear, by two movements, in rear of the center of the first line.

911. To form in three lines, the third in close column, or in line of platoon columns, the colonel sends special instructions to the major of the third squadron as to its formation, and gives the commands to the other squadrons for forming in two lines.

Being in Column of Fours, to Form Line by Two Movements.

912. The column of fours having partly changed direction to the right, to form line to the left: 1. Fours left, 2. Rear squadrons, left front into line, 3. MARCH.

The squadron that has changed direction to the right forms line to the left and halts; the squadrons in rear execute left front into line, the leading fours advancing only so far as to be in line with the squadron that formed line to the left.

913. To form line to the right: 1. Fours right, 2. Rear squadrons left front into line, faced to the rear, 3. March.

The squadron that has changed direction forms line to the right and halts; the squadrons in rear form left front into line faced to the rear.

914. The column, having partly changed direction to the left, is formed to the right and right front into line, or to the left and right front into line faced to the rear, by similar commands and means.

Being in Column of Fours, to Form Right and Left Front into Line.

915. 1. Right and left front into line, 2. MARCH.

The first squadron forms right front into line; the second forms left front into line on the left of the first, and the third forms left front into line on the left of the second.

If the colonel commands left and right front into line, the first squadron forms left front into line, and the rear squadrons form right front into line on the right of the first.

Being in Column of Fours, to Form Right and Left Front into Line in Two Lines.

916. 1. In two lines, 2. Right and left front into line, 3. Third (or such) squadron, second line, 4. March.

The first squadron forms right front into line; the second forms left front into line on the left of the first; the third forms line by two movements (Pars. 727, 729), and is established in rear of the center of the first line.

If the second command of the colonel be: Left and right front into line, the first squadron forms left front into line and the second forms right front into line on the right of the first.

917. Being in column of fours, the regiment forms line of troops in columns of fours according to the principles for forming line; each major marches his squadron opposite its point of rest on the principles explained for forming the regiment front into line, or on right or left into line, and then forms it into line of columns of fours as in the School of the Squadron.

The interval between squadrons in line of columns of fours at closed intervals, is troop front.

918. All movements in line of columns of fours, School of the Squadron, may be executed by the regiment by similar commands and means, the colonel designating: (Such) squadron, when necessary.

919. The regiment in line of battle, advancing considerable distances or over broken ground, marches in line of squadrons or other sub-divisions in columns of fours, or in line of platoon columns.

Column at Full Distance.

920. The regiment being in line, forms column of troops or platoons to the right or left, as prescribed in the School of the Squadron.

921. The regiment being in column at full distance, forms line to the right or left, marches to the rear, advances, and halts as prescribed in the School of the Squadron.

To form line to the front, the first squadron forms front into line as prescribed in the School of the Squadron; each of the other squadrons is marched in column of fours opposite its position, and is then formed front into line (Par. 905).

To form on right or left into line, the first squadron forms on right (or left) into line as prescribed in the School of the Squadron; the others successively execute the same movement, each sixteen yards beyond the one preceding.

Being in Column at Full Distance, to Change Direction.

922. Being in march: 1. Column right (or left), 2. MARCH.

The first squadron changes direction to the right (Par. 736); the others move forward and each at the command of its major changes direction on the same ground as the first.

The principal guide marking the turning point of the first squad ron is relieved by a principal guide from the second, and he in turn by one from the third, each as soon as his squadron has passed him.

Being at a halt: 1. Forward, 2. Guide (right, left or center), 3. Column right (or left), 4. March.

Being in Column at Full Distance, to Face the Column to the Rear.

923. 1. Face to the rear, 2. Fours right (or left) about, 3. MARCH. The majors add: 4. Squadron, 5. Halt, as the fours unite in line.

Column of Masses.

924. In column of masses, the distance of each squadron from the one preceding is equal to the front of its first troop.

925. In forming column of masses from line, the designated squadron ploys into close column; the others ploy in rear of the one designated, the squadron nearest the point of rest taking precedence in the column. The rear squadrons are dressed to the same flank as the designated squadron.

926. Column of troops at full distance is closed in mass by the commands and means prescribed for the squadron (Par. 753); each

squadron in rear of the first is closed in mass when at troop distance from the one preceding.

927. Being in column of masses, full distances are taken by the commands and means prescribed for the squadron (Par. 755); each squadron in rear of the first takes full distance when its leading troop has troop front and thirteen yards from the preceding squadron.

Being in Line, to Ploy into Column of Masses on the First Troop of the First Squadron.

928. 1. Column of masses, 2. On first troop, first squadron, 3. March.

The first squadron ploys into close column on its first troop (Par. 756); the other squadrons wheel by fours to the right, incline to the right, and each marches so that its leading troop may enter the column at troop distance and fifteen yards in rear of the rear troop of the preceding squadron. The second squadron ploys faced to the left in rear of the first (Par. 758), and the third ploys in rear of the second; the left guides cover.

The regiment is ployed on the fourth troop, third squadron, on the same principles.

Being in Line, to Ploy into Column of Masses on an Interior Squadron.

929. 1. Column of masses, 2. On first troop, second squadron, 3. March.

The second squadron ploys on its first troop (Par. 750).

The major of the first squadron commands: 1. Fours left, 2. Troops, 3. Column left, 4. March, 5. Guide right, and when his leading fours are troop distance and twelve yards beyond the rear of the second squadron, commands: 1. Troops, 2. Column right, 3. March, and then ploys his squadron faced to the right in rear of the second; the troops are dressed to the left; in a similar manner, the major of the third ploys his squadron faced to the left in rear of the first.

The major of the first squadron may command: 1. Fours left, 2. March, 3. Column left, 4. March, and when the head of the column has advanced troop distance beyond the rear of the second squadron, he commands: 1. Close column, faced to the rear, 2. First troop, 3. Column right, 4. March.

Should the command of the colonel be: 1. Column of masses, 2. On fourth troop, second squadron, 3. MARCH, the movement is executed on the same principles. The third squadron ploys in rear of the second, and the first in rear of the third.

Being in Column of Fours, to Ploy into Column of Masses, Faced to the Front.

930. 1. Column of masses, 2. First troop, first squadron, 3. Column right (or left); or, 3. Column half right (or half left), 4. March.

The first squadron ploys faced to the front (Par. 757); the others successively execute the same movement, each in rear of the one preceding.

Being in Column of Fours, to Ploy into Column of Masses, Faced to the Rear.

931. 1. Column of masses, faced to the rear, 2. First troop, first squadron, 3. Column right (or left), 4. March.

The first squadron ploys faced to the rear (Par 75%); the others move forward and successively execute the same movement, each major giving his command so that his first troop may enter the column at a point troop distance beyond the point where the last troop of the preceding squadron entered it.

Being in Column of Fours, to Ploy into Column of Masses, Faced to the Right or left.

932. 1. Column of masses, 2. First troop, first squadron, 3. Fours right (or left), 4. March.

The first squadron ploys faced to the right (Par. 758); the others incline to the left and successively execute the same movement, each major giving his commands so that his first troop may enter the column at troop distance and fifteen yards in rear of the rear troop of the preceding squadron.

- 933. Being in column of troops or fours, column of masses is formed on the rearmost troop by first wheeling about by fours and then closing in mass; when the column has closed, the regiment is again wheeled about by fours.
- 934. The column of masses advances, halts, marches by the flank, resumes the march in column, faces to the rear, marches to the rear and changes direction on the march, by the same commands as the column when at full distance.

Being in Column of Masses, to Change Direction by the Flank.

935. 1. Change direction by the right (or left) flank, 2. March.

The first squadron changes direction by the right flank (Par. 761); each of the others wheels by fours to the right, and is marched with the guide to the left, by two partial changes of direction to the left, to its position in the new column, then wheeled by fours to the left and halted.

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TO DEPLOY THE COLUMN OF MASSES.

Being in Column of Masses, to Deploy to the Right or Left.

936. 1. Deploy column, 2. Fours right (or left), 3. MARCH.

The first squadron deploys to the right (Par. 764*a*); the second is marched in close column to its position on the line to the right of the first and then deployed in the same manner as the first; the third, in a similar manner, is deployed on the right of the second.

The second and third squadrons may be marched in column of fours (Par. 759b) to their places on the line.

To deploy faced to the rear, the colonel adds: faced to the rear, after deploy column. The first squadron deploys faced to the rear (Par. 764c); the others form on the line faced to the rear.

937. To form line on the rear of the column, facing either to the front or to the rear, the colonel first faces the column to the rear, and then executes the movement as explained.

Being in Column of Masses, to Deploy to the Right and Left.

938. 1. Deploy Column, 2. Fours right and left (or left and right), 3. MARCH.

The first squadron deploys to the right; the second and third deploy on the line, the second to the left of the first, and the third to the left of the second.

Being in Column of Masses, to Deploy in Two Lines.

939. 1. In two lines, 2. Deploy column, 3. Third (or such) squadron, second line, 4. Fours right (or left), 5. MARCH.

The first squadron deploys to the right; the second forms line on the line of the first, and to its right; the third moves in column of fours and forms line in rear of the center of the first line.

If the colonel commands: 4. Fours right and left, the first squadron deploys to the right; the second forms line on the line of the first and to its left; the third deploys to the left.

If the colonel commands: 4. Fours left and right, the first squadron deploys to the left; the second forms line on the line of the first and to its right; the third deploys to the right.

Being in Column of Masses, to Deploy in Three Lines.

940. 1. Squadrons, 2. Deploy Column, 3. Fours right (or left), 4. March.

Being in Column of Masses, to March to the Right or Left in Line of Squadrons in Columns of Fours.

941. 1. Squadrons, 2. Columns of fours, 3. (Such) troop, 4. Fours right (or left), 5. MARCH, 6. (Such) the base squadron.

Columns of Squadrons.

942. Being in line, or column of fours, the regiment ploys into column of squadrons by approximating the principles for forming close column, School of the Squadron; except that the leading squadron halts upon forming line, and that the colonel when necessary specifies the distance (Par. 898).

Being in Line to Ploy into Column of Squadrons.

943. 1. Column of squadrons, 2. On first (or third) squadron, 3. Fours right (or left), 4. MARCH.

The first squadron stands fast. The second executes fours right, column right, marches squadron distance or the specified distance to the rear, changes direction to the left and forms line to the left in rear of and parallel to the first squadron. The third squadron executes fours right, column half right, and forms in rear of the second as explained for the second; the left flanks cover.

Being in Line, to Ploy into Column of Squadrons on Second Squadron.

944. 1. Column of squadrons, 2. On second squadron, 3. Fours left and right, 4. March.

The second squadron stands fast; the first squadron executes fours left and forms line to the right in rear of the second; the third executes fours right and forms line to the left in rear of the first; the right flanks cover.

Being in Column of Fours, to Form Column of Squadrons Faced to the Right or Left.

945. 1. Column of squadrons, 2. First squadron, 3. Fours right (or left), 4. March.

The first squadron forms line and is halted; the others incline to the left and each enters the column, forms line and halts at the prescribed distance in rear of and parallel to the one preceding; the right flanks cover.

Being in Column of Fours, to Form Column of Squadrons Faced to the Rear.

946. 1. Column of squadrons, faced to the rear, 2. First squadron, 3. Column right (or left), 4. MARCH.

The first squadron changes direction to the right and when its rear has cleared the flank of the column by ten yards, forms line to the right and halts.

The squadrons in rear move forward, and each, when it has passed squadron front and seventeen yards, or the specified distance, beyond the one preceding, changes direction to the right, forms line and halts as prescribed for the first; the right flanks cover.

Being in Column of Squadrons, to Form Front into Line.

947. 1. Right (or left) front into line, 2. MARCH.

The first squadron stands fast; the second forms line on the right of the first, and the third on the right of the second.

The colonel may direct that the third squadron shall form on the left (or right) of the line.

948. To form line faced to the rear, the colonel adds: Faced to the rear, to the first command. The first squadron is faced to the rear; the others form on the line faced to the rear.

Line of Masses.

949. The interval between squadrons in line of masses is forty-eight yards.

In line of masses, each major takes post twenty yards in front of the center of his first troop.

In all formations into line of masses, whether by a simultaneous or successive movement, the adjutant or sergeant-major of each squadron posts the guidon and principal guide of its leading troop.

Being in Line of Masses, to Extend or Close Intervals.

950. To extend intervals: 1. On (such) squadron, 2. Take deploying intervals, 3. March.

The designated squadron stands fast; the squadrons to the right are marched by the right flank, and those to the left, by the left flank, inclining slightly to the rear; each squadron when it has its interval, is halted in close column on the line; intervals are closed on the same principles: 1. On (such) squadron, 2. Close intervals, 3. March.

Being in Line, to Form Line of Masses on the First or Third Squadron.

951. 1. Line of masses, on first troop, first squadron, 2. MARCH.

The first squadron ploys into close column on its first troop (Par. 756); the second squadron moves by the right flank and ploys into close column faced to the left so as to have forty-eight yards interval from the left flank of the first; in the same manner the third ploys on the left of the second.

Line of masses on the fourth troop, third squadron, is formed according to the same principles.

952. Line of masses may be formed on the second squadron, the colonel designating the first or fourth troop. The second squadron ploys on the designated troop; the others ploy on the troop nearest the point of rest. Unless directed by the colonel, the squadron with the interval of sixteen yards does not correct it until the next movement; the other squadron closes to its proper interval before ploying.

Being in Column of Fours, to Form Line of Masses Faced to the Right or Left.

953. 1. To the right (or left) into line of masses, 2. MARCH.

The first squadron ploys into close column faced to the right (Par. 758); each of the others executes the same movement so as to have its interval of forty-eight yards from the right flank of the squadron preceding.

Being in Column of Fours, to Form on Right or Left into Line of Masses.

954. 1. On right (or left) into line of masses, 2. MARCH.

The major of the first squadron commands: 1. Column right, 2. March, and his first troop having advanced sixty yards in the new direction, he commands: 1. Close column, 2. First troop, 3. Column left, 4. March (Par. 757); each of the other squadrons passes in rear of and beyond the one preceding, and executes the same movement as explained for the first, so as to have the interval of forty-eight yards from the squadron on its right.

Being in Column of Fours, to Form Front into Line of Masses.

955. 1. Right (or left) front into line of masses, 2. MARCH.

The major of the first squadron commands: 1. Close column, 2. First troop, 3. Column right, 4. March; the other majors command: 1. Column half right, 2. March.

The first squadron ploys into close column faced to the front (Par. 757); each of the other squadrons is marched to the right front and executes the same movement so as to have the interval of forty-eight yards from the one preceding.

956. Right and left (or left and right) front into line of masses is executed on the same principles; the first squadron ploys into close column, as in executing right front into line of masses; the second and third execute left front into line of masses, to the left of the first.

Being in Column of Fours, to Form Front into Line of Masses, Faced to the Rear.

957. 1. Right (or left) front into line of masses, faced to the rear, 2. MARCH.

The first squadron ploys into close column faced to the rear (Par. 757c); each of the other squadrons is marched to the right front and executes the same movement so as to have the interval of forty-eight yards from the one preceding.

To Align the Line of Masses.

958. If necessary to rectify the line, the colonel assures the guidon and principal guide of the first troop of one of the squadrons in the desired direction and then commands: Guides on the line.

The adjutant or sergeant-major of each of the other squadrons posts the guidon and a principal guide of its leading troop on the line of those established by the colonel, the guidon on the side of the base squadron; the majors dress their squadrons toward the point of rest.

The first troop of each squadron is dressed on the guides; each of the other troops is successively dressed at closed distance.

If the new line be established at a considerable distance from the squadrons, each major will move his squadron to its new position before dressing it.

Movements of Masses.

959. The line of masses advances, halts, faces to the rear and marches to the rear by the same commands and means as the regiment in line.

Being in Line of Masses, to Change Front.

960. 1. Change front on first (or third) squadron, 2. MARCH.

The movement is executed on the principles explained for the squadron changing front in line of platoon columns (Par. 783).

Being in Line of Masses, to March by the Flank.

961. 1. Fours right (or left), 2. MARCH, 3. Guide (right or left). The squadrons preserve the distance of forty-nine yards.

The Line of Masses Marching by the Flank, to Change Direction.

962. 1. Change direction to the right (or left), 2. MARCH.

The first squadron changes direction to the right (Par. 677); the others move forward, and, at the command of their majors, change direction on the same ground as the first.

If the regiment be marching at a gallop, the colonel reduces the gait to a trot before executing this movement.

The Line of Masses Marching by the Flank, to Form Line of Masses to the Right or Left.

963. 1. Fours right (or left), 2. MARCH, 3. (Such) the base squadron, or 3. Squadrons, 4. Halt.

Being in Line of Masses, to Form Column of Fours.

964. Being at a halt: 1. Column of fours, 2. First troop, first (or third) squadron, 3. Right (or left) forward, 4. Fours right (or left), 5. March.

The first squadron forms column of fours to the front (Par. 759); each of the others successively executes the same movement and inclines to the right or left so as to follow the squadron preceding at the prescribed distance.

The colonel may command: 1. Column of fours, 2. First (or fourth) troop, first squadron, 3. Fours right; or, 2. First (or fourth) troop, third squadron, 3. Fours left, 4. March.

The designated squadron forms column of fours to the right (Par. 759b); each of the others successively executes the same movement in time to follow the squadron preceding at the prescribed distance.

Being in Line of Masses, to Form Column of Masses, Faced to the Right or Left.

965. 1. Squadrons, 2. Change direction by the left (or right) flank, 3. MARCH.

Each squadron changes direction by the left flank (Par. 761).

Being in Column of Masses, to Form Line of Masses, to the Right or Left.

966. The colonel causes the squadrons to change direction by the left or right flank (Par. 761); or commands: 1. Squadrons, 2. Column right (or left), 3. MARCH.

Being in Line of Masses, to Form Column of Masses, Faced to the Front.

967. 1. Column of masses on first (or such) squadron, 2. MARCH.

The first squadron stands fast or is halted; the second is placed in close column in rear of the first, and the third in rear of the second.

If the third squadron be designated, the second takes position in rear of the third, and the first in rear of the second.

If the second squadron be designated, the first takes position in rear of the second, and the third in rear of the first.

Each major may maneuver his squadron into position in mass or in column of fours.

The adjutant or sergeant-major of each squadron moves in advance to indicate the point where his squadron moves by the flank, or changes direction, to enter the column.

968. Being in line of masses, to form the column of masses facing to the rear, the colonel first causes the squadrons to wheel about by fours, and then gives the same commands as before.

Being in Column of Masses, to Form on Right or Left into Line of Masses.

969. Being in march: 1. On right (or left) into line of masses, 2. MARCH.

The first squadron changes direction to the right and is halted when its rear has cleared the column by twelve yards; each of the other squadrons marches beyond the preceding one, changes direction to the right, is halted and established abreast of the first with the interval of forty-eight yards.

Being in Column of Masses, to Form Front into Line of Masses.

970. 1. Right (or left) front into line of masses, 2. MARCH.

The first squadron stands fast or is halted. The second and third squadrons are moved in masses into their places, the second on the right of the first, the third on the right of the second. The colonel may direct that the third squadron shall form on the left (or right) of the line.

Being in Line to Change Front.

971. To change front, the colonel forms column of fours to the right or left and then executes front into line on the head of any squadron, or front into line faced to the rear.

Movements by Platoons.

 $972. \;\;$ The interval between squadrons in line of platoon columns is twenty-four yards.

973. All movements in column of platoons, and line of platoon columns, School of the Squadron, may be executed by the regiment by similar commands and means; the colonel designates: (Such) squadron, when necessary.

974. In forming line, or line of platoon columns, each major first moves his squadron into position on the principles for forming line from column of fours, and at the proper time gives the commands for forming line or line of platoon columns.

Being in Line of Platoon Columns, to Extend or Close Intervals.

975. Being in march: 1. On (such) troop (such) squadron, 2. Extend (or close) intervals, 3. MARCH.

The designated squadron extends intervals (Par. 746); the squadrons to the right oblique to the right by the heads of columns, each major giving the commands to extend intervals when his left troop has its interval from the squadron next on its left; the left troop changes direction half left, moves up on the line, takes the gait of, and dresses toward the designated squadron. The squadrons to the left of the designated squadron extend intervals in the same manner to the left.

976. Intervals are extended and closed without gaining ground to the front by the commands and means prescribed for the squadron (Par. 782).

Being in Line of Platoon Columns, to March in Column of Platoons.

977. 1. Column of Platoons, 2. First (or fourth) troop, first (or third) squadron, 3. Forward, 4. Guide (right or left), 5. MARCH; or, 5. Column right (or left), 6. MARCH.

The designated squadron executes the movement, and is followed by the others at the proper distance.

Being in Line, to Form Double Column of Fours.

978. 1. Double column of fours, 2. MARCH.

To the first command the major of the center squadron adds: Center forward; the major of the first adds: Fours left; the major of the third adds: Fours right.

The second squadron forms double column of fours as in Par. 786. The first squadron follows the right column, and the third squadron follows the left column, of the second squadron.

If the regiment consist of but two squadrons, the right squadron breaks from the left and the left squadron breaks from the right to march to the front in column of fours (Par. 785).

If the regiment be in two lines, each line forms double column of fours.

979. Being in line: 1. Squadrons, 2. Double column of fours, 3. MARCH, 4. (Such) the base squadron. Each squadron forms double column of fours.

ORDER IN ECHELON.

Being in Line at a Halt, to Advance in Echelon.

980. 1. Form echelon, at (so many) yards, 2. (Such) the base squadron, 3. March.

At the second command, the major of the designated squadron commands: 1. Forward, 2. Guide center; the other majors caution: Stand fast.

At the command *march*, the designated squadron advances; the others take up the march, each when it has the specified distance from the one next preceding.

A principal guide from each rear squadron marches at the specified distance directly in rear of the nearest flank of the preceding squadron. Each rear squadron marches abreast of and preserves the interval of sixteen yards from its principal guide thus posted.

981. The regiment in echelon advances, halts, obliques, marches to the rear or by the flank, by the same commands as when in line (see Par. 678).

982. The regiment being in echelon of squadrons may be formed into echelon of troops or platoons as explained in the School of the Squadron.

Being in Echelon of Squadrons, to Form line.

983. 1. Form line on (such) squadron, 2. MARCH.

The designated squadron halts or stands fast; the others form on the line of the one designated, by moving to the front or rear.

A general alignment is given if necessary.

Being in Echelon of troops, to Form Line.

984. 1. Form line on (such) troop (such) squadron, 2. MARCH.

THE STANDARD.

The manual of the standard is as prescribed for the guidon (see foot note Par. 466), except that at carry standard, dismounted, the butt of the lance is supported at the right hip.

Standard Salute.

Being mounted: Lower the lance to the front by straightening the right arm to its full extent.

Dismounted: Slip the right hand up the lance as high as the eye, then lower the lance to the front by straightening the right arm to its full extent.

The standard salutes in the ceremony escort of the standard and when saluting an officer entitled to the honor, as provided in Par. 422 to 427, A. R. 1889, but in no other cases.

If marching, the salute is executed when at six yards from the officer entitled to the salute; the carry is resumed when it has passed six yards beyond him.

At a halt, the salute is executed at the command present saber (or arms); the carry is resumed at the command carry saber (or arms).

The Guard of the Standard.

The guard of the standard is composed of four non-commissioned officers, selected by the colonel.

The standard is carried by a sergeant who is No. 2 of the guard. The standard is with the squadron designated by the colonel, usually the second, or the first if there be but two squadrons.

The standard, kept at the quarters or office of the colonel, is escorted by the guard to the standard troop on its parade ground; it is returned in the same manner.

The guard of the standard, at the command of the standard bearer, presents saber on receiving and parting with the standard; in the latter case, the guard returns to the carry at the command of the senior member of the guard.

The Band.

The band is generally formed in column of fours. It may be formed in two or more ranks.

Dismounted, the band is formed in two or more ranks, with sufficient intervals between the men and distances between the ranks

to permit a free use of the instruments.

In line, the band is posted with the left of its front rank sixteen yards to the right of the rank. In line of columns, the left of its front rank is sixteen yards to the right of the leading subdivision of the right column; in column, it marches with its rear rank sixteen yards in front of the officers of the first subdivision, or its front rank sixteen yards in rear of the rear subdivision according as the command is facing.

Dismounted, the band takes post as when mounted.

The trumpeters, when united, form with and in rear of the band; when the band is not present, the posts, movements and duties of the trumpeters are the same as prescribed for the band.

When the command with which the band is posted wheels about by fours the band executes the countermarch.

Dismounted, when right, left or about face is executed, the band faces in the same manner; when marching, the different ranks dress to the right.

The signals for the movements of the band will correspond to the saber signals as far as practicable.

The chief trumpeter, when not with the colonel, takes post two yards in front of the center of the front rank of the band, and gives the signals for its movements. In the absence of the chief trumpeter his post may be filled by detail.

When the signals for movements of the band are not used by the chief trumpeter, the band is marched as explained for the squad, the command band being substituted for squad.

To open ranks. Being at a halt: 1. Open ranks, 2. MARCH, 3. FRONT.

The front rank dresses to the right; the other ranks move backward, each taking the distance of three yards (dismounted two yards) from the rank preceding, halts and dresses to the right.

1. Inspection, 2. Instruments.

Each musician, as the inspector approaches him, raises his instrument in front of his body, reverses it so as to show both sides and then returns it to its former position.

To close ranks: 1. Close ranks, 2. MARCH.

The front rank stands fast; the other ranks move up and close to the proper distance.

A trumpeter when inspected executes with his trumpet what is prescribed for a band musician.

In rendering honors, whenever the standard salutes, the trumpeters sound the march, flourishes or to the standard, at a signal by the chief trumpeter.

The countermarch is signaled by rear point, and is executed by those in the leading rank or four, to the right of the chief trumpeter, turning individually to the right about, and those to the left of him turning individually to the left about, each followed by those covering him in the column; the chief trumpeter passes through the center. Dismounted, the chief trumpeter faces to the rear and signals the forward, march.

To increase intervals, wave the saber several times to the right and left in front of the body.

To close intervals extend the arm vertically and rapidly circle the saber around the hand.

The intervals are increased before executing the countermarch and closed after the countermarch.

CEREMONIES.

General Rules.

On occasions of ceremony, troops are arranged from right to left in line, and from head to rear in column, in the following order: First, infantry; second, light artillery; third, cavalry. Artillery serving as infantry is posted as infantry; dismounted cavalry and marines are on the left of the infantry; engineer troops are on the right of the command to which they are attached. When cavalry and light artillery are posted together, the artillery is posted on the left. In the same line, regulars, volunteers and militia are posted in line from right to left, or in column from head to rear, in the order named. On all other occasions, troops of all classes are posted at the discretion of the general or senior commander.

When forming for ceremonies, the troops of the squadron are posted according to the rank of the troop commanders present, as prescribed in the School of the Squadron (Par. 543); the squadrons of the regiment, the regiments of the brigade, the brigades of the division and the divisions of the corps are posted from right to left in line or from the head to rear in column, in the order of rank of their respective commanders present, the senior on the right, or at the head. A troop whose captain commands the squadron retains

its place according to his rank, unless otherwise directed; the same rule applies to the higher units.

Non-commissioned officers commanding troops or platoons have the same armament as the men of their troops; they do not execute the exercises in the manual. In rendering honors, they execute the present and carry. Dismounted, they execute only the order and parade rest; in rendering honors, the present and carry; when marching, the right shoulder and carry.

Cavalry armed with carbine and pistol, or the carbine only, in rendering honors mounted, execute advance carbine at the command present arms.

General Rules for Reviews.

The adjutant or adjutant-general posts men or otherwise marks the points where the column changes direction, in such manner that the right flank in passing shall be about ten yards from the reviewing officer.

The post of the reviewing officer, usually opposite the center of the line, is marked by a flag.

The reviewing officer should be at the flag before the head of the column reaches that point; before that time he may take any position to observe the movements of the troops.

The reviewing officer salutes the standard whether entitled to a salute from it or not.

The staff of the reviewing officer is in single rank, six yards in rear of him, in the following order from right to left: Chief of staff, adjutant general, aids, then the other members of the staff in the order of rank, the senior on the right; his flag and orderlies place themselves three yards in rear of the staff, the flag on the right.

Officers of the same or higher grade, and distinguished personages invited to accompany the reviewing officer, place themselves on his left; their staffs and orderlies place themselves on the left of the staff and orderlies of the reviewing officer; all others who accompany the reviewing officer place themselves on the left of his staff, their orderlies in rear.

While riding around the troops, the reviewing officer may direct his staff, flag and orderlies to remain at the post of the reviewing officer; or, that only his personal staff and flag shall accompany him.

The staff officers, in passing around the troops, or in review, ride in one or more ranks, according to the number.

Commanders of brigades and divisions take their places in the column in time to allow the commanders in front of them to take their places when at one hundred yards from the reviewing officer.

The staffs, flags and orderlies of brigade, division and corps commanders place themselves in the order prescribed for the staff, flag and orderlies of the reviewing officer.

When the commander of a corps, division, brigade, regiment or squadron turns out of the column to place himself near the reviewing officer, his post is on the right of the commanders already there; his staff will arrange themselves in single rank on the right of the staff already there; his flag and orderlies in rear of his staff. Each commander, when his rear troop has passed, salutes the reviewing officer, and with his staff and orderlies rejoins his command.

Commanders of brigades, divisions and corps, and their staff officers, draw saber when they take their places in column before passing in review; they return saber immediately after placing themselves on the right of the reviewing officer.

The brigade commander, while the reviewing officer is not in front or in rear of his brigade, may cause it to stand at ease, rest, or to dismount and rest, and resume attention and mount so as not to interfere with the ceremony.

The colonels repeat the commands of the brigade commander. Whenever the colonel faces the line to give commands, the majors face at the same time; they resume their front after seeing the movement executed. All such commands are executed when they have been repeated by the majors. When the command repeated is present saber (or arms) the colonel's staff salute at the command of the colonel; the colonel and majors salute after resuming their front. The same rules apply to the colonels and majors and to the general's and colonel's staffs, when the brigade commander gives commands.

When the general or colonel faces the line to give commands, the staff and orderlies do not change position.

In line, at the command, prepare for review, march, the standard bearer takes post in front of his position, on the line of troop officers; in line of columns he takes post opposite the left of the leading subdivision on the line of the troop officers of that subdivision; at the command posts, he resumes his place in the rank.

When the rank of the reviewing officer entitles him to the honor, each standard salutes at the command present arms, given or repeated by the major of the battalion with which it is posted, and again in passing in review, when six yards from the reviewing officer; the standard is raised when it has passed six yards beyond the reviewing officer.

The band of each regiment plays while the reviewing officer is passing in front or in rear of the regiment.

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Each band, after passing the reviewing officer, turns out of the column and takes post in front of the reviewing officer, continues to play until its regiment has passed, then ceases playing and follows in rear of its regiment; the band of the next following regiment then commences.

While marching in review, but one band in each brigade plays at a time, and but one band at a time within one hundred yards of the reviewing officer.

The trumpeters of each regiment are consolidated in rear of the

When the standard salutes, in formations for review, the march, or flourishes are sounded by all the trumpeters with the bands; in passing in review, by the trumpeters with the band that is halted in front of the reviewing officer.

The formation for review may be modified to suit the ground, and the present in line and the ride around the line by the reviewing officer may be dispensed with; the troops simply march in review with the guide either right or left, according as the post of the reviewing officer is on the right or left of the column; the officers and non-commissioned officers who have designated places on a flank of the column when the guide is right are on the opposite flank when the guide is left; in the latter case, commanders and their staffs turning out of the column take post as prescribed, but to the left of the reviewing officer.

Troops pass in review at a walk, trot or gallop. No salutes are made when passing at the trot or gallop.

In reviews of brigades, divisions and corps, each squadron, after its rear has passed the reviewing officer fifty yards, takes an increased gait for one hundred yards, in order not to interfere with the march of the column in rear.

The troops having passed the reviewing officer, return to their camps by the most practicable route, being careful not to delay the march of the troops in their rear.

When it is necessary that an organization should be reviewed before an inspector junior in rank to the commanding officer, the commanding officer will receive the review and will be accompanied by the inspector.

SQUADRON REVIEW.

The squadron being in line, the staff, except the adjutant, in the order of rank, the senior on the right, take post with one yard interval, in line with the chiefs of platoons, four yards to the right of the rank; the non-commissioned staff and regimental non-commissioned officers, except the sergeant-major, take post in a similar manner on a line with and eight yards to the left of the rank.

The reviewing officer takes his post.

The major in front of and facing the center commands: 1. Prepare for review, 2. MARCH, 3. FRONT.

At the command march, the staff, chiefs of platoons and standard bearer move up on the line of captains; the guidons take post on the right of the rank of their respective troops; the sergeant-major takes post on the right of the non-commissioned staff; the major's trumpeter joins the trumpeters; the line of officers, the rank and the line of file-closers dress to the right; the major rides at a trot or gallop to the right of the squadron and verifies the alignment of the officers and rank; the adjutant verifies the alignment of the file-closers.

At the command *front*, the adjutant takes post on the right of the staff; the major takes post facing to the front, twenty yards in front of the center of the squadron. The reviewing officer moves a few paces toward the major and halts, when the major turns about and commands: 1. *Draw*, 2. Saber, 3. *Present*, 4. Saber.

The officers and men present sabers and the guidons salute; should the rank of the reviewing officer entitle him to the honor, the standard salutes and the trumpeters sound the march or flourishes (Pars. 422 to 427 A. R. 1889); the major turns about and salutes.

The reviewing officer returns the salute, after which the major turns about and commands: 1. Carry, 2. Saber, turns again to the front, and returns saber.

The reviewing officer now starts for the right of the line; the major joins him, salutes, and, placing himself on his right, accompanies him around the squadron. The reviewing officer proceeds to the right of the band, passes in front of the troop officers to the left of the line and returns to the right, passing in rear of the file-closers.

The band plays while the reviewing officer is going around the squadron, ceasing when he leaves the right to return to his post. On leaving the right of the line, the major takes his place on the left of the reviewing officer, accompanies him a few yards, salutes, moves directly to his post in front of and facing the squadron, draws saber, and commands: 1. Attention, 2. Posts.

The chiefs of platoons and standard turn left about and take their posts. The staff and non-commissioned staff stand fast. The major then commands: 1. Troops (or platoons) right, 2. MARCH.

The staff place themselves on a line, with intervals of one yard, fifteen yards in front of the center of the leading subdivision, the adjutant on the right, the others in the order of rank from right to left.

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The non-commissioned staff and regimental non-commissioned officers place themselves on a line equal to the front of the rear subdivision twelve yards in rear of the rear subdivision, the sergeant-major on the right, the others in the order of rank from right to left.

The band takes post thirty yards in front of the leading subdivision.

The column being formed, the major commands: 1. Pass in review, 2. Forward, 3. Guide right, 4. MARCH.

At the command march, the column moves off, the band playing; the column changes direction, without command from the major, at the marked points; the major takes post six yards in front of the staff immediately after the second change of direction; the band having passed the reviewing officer, turns to the left out of the column, takes post in front of the reviewing officer and remains there until the review terminates.

The major and staff salute together when the major is at six yards from the reviewing officer and return to the carry together when the major has marched six yards beyond him; the other officers, the non-commissioned staff officers, the regimental non-commissioned officers, non-commissioned officers in command of subdivisions and the guidons salute and return to the carry at the points prescribed for the major; in saluting, they turn the head and look toward the reviewing officer. Staff and non-commissioned staff officers without sabers or swords salute with the right hand. If the reviewing officer be entitled to the honor, the standard salutes when at six yards from him and is raised when at six yards beyond him; as the standard salutes, the trumpeters sound the march or flourishes, the band continuing to play.

Non-commissioned staff officers, regimental non-commissioned officers and non-commissioned officers in command of subdivisions salute as prescribed in the School of the Soldier (Par. 186).

The reviewing officer returns only the salute of the major and standard; he salutes the standard whether entitled to a salute from it or not.

The major, having saluted, takes post on the right of the reviewing officer, remains there till the rear of the squadron has passed, and then salutes and rejoins the squadron. His staff place themselves in rear of the major, on the right of the staff of the reviewing officer; they accompany the major when he rejoins the squadron.

The band ceases to play when the column has completed its first change of direction after passing the reviewing officer. When the squadron arrives near its original position in column, the major commands: 1. Trot (or gallop), 2. MARCH.

The squadron passes in review as before, except that there is no saluting, the band playing.

The review terminates when the rear troop has passed the reviewing officer; the band then ceases to play, and, unless otherwise directed by the major, returns to the position it occupied before marching in review, or is dismissed; the major and his staff rejoin the squadron.

The squadron then executes such movements as the reviewing officer may have directed or is marched to its parade ground and dismissed.

The march in review at the trot (or gallop) may, in the discretion of the reviewing officer, be omitted; the review then terminates as before. Or, the reviewing officer may require the squadron to march in review a third time at the gallop; the review then terminates as before.

REGIMENTAL REVIEW.

The regiment is formed in line, in line of platoon columns, or in line of masses.

In Line.

The colonel takes post facing to the front; the adjutant, during review, is on the right of the staff; the regimental non-commissioned staff, regimental non-commissioned officers and orderlies are three yards in rear of the staff, the chief trumpeter on the right, the sergeant-major on his left. Non-commissioned staff officers other than regimental are eight yards from the left of the left squadron.

When the reviewing officer approaches his post, the colonel faces the regiment and commands: 1. Prepare for review, 2. March.

Executed in each squadron as prescribed for the squadron review; the lieutenant-colonel takes post twenty yards in front of the right flank. The majors having taken their posts, the colonel faces to the front.

The reviewing officer, accompanied by his staff, then approaches the colonel and halts at thirty yards in front of him.

The colonel then faces the regiment and commands: 1. Draw, 2. Saber, 3. Present, 4. Saber.

The colonel and majors face to the front and salute. The staff salute and return to the carry at the command of the colonel.

The reviewing officer having returned the salute, the colonel faces the regiment and commands: 1. Carry, 2. Saber, and faces to the front.

The colonel and his staff, non-commissioned staff, etc., then return saber; the colonel joins the reviewing officer, placing himself on his right; the colonel's staff place themselves on the right of the staff of the reviewing officer, unless the reviewing officer advances alone, in which case the colonel alone joins and accompanies him, the staffs remaining at their posts.

The reviewing officer then goes to the right of the line, passes in rear of the line of majors to the left, and returns in rear of the file-closers to the right, whence he proceeds to his post.

The band plays while the reviewing officer is passing around the regiment.

When the reviewing officer leaves the right of the line, after passing around the regiment, the colonel returns by the shortest line to his post facing the regiment, and draws saber; the colonel's staff take post at the same time in rear of the colonel and draw saber.

The colonel then commands: 1. Attention, 2. Posts, 3. Troops (or platoons) right, 4. March.

The non-commissioned staff of each squadron take post as prescribed in the squadron review; the column having been formed, each major takes post twenty yards in front of the center of his leading subdivision, his adjutant six yards in rear of him; the lieutenant-colonel is in line with the major of the leading squadron, six yards to the right of the column; the band is thirty yards in front of the leading subdivision; the non-commissioned staff, other than regimental, twelve yards in rear of the rear subdivision, the sergeant-major of the rear squadron on their right.

The colonel then commands: 1. Pass in review, 2. Forward, 3. Guide right, 4. March.

The column passes in review according to the principles prescribed in the squadron review. When the head of the column has made its second change of direction, the colonel places himself twenty-four yards in front of the band, his staff six yards in rear of him, the non-commissioned staff, etc., the sergeant-major on the right, three yards in rear of the staff.

The colonel having saluted, places himself on the right of the reviewing officer.

The majors do not turn out of the column after passing the reviewing officer.

The colonel rejoins and concludes the review as prescribed for the squadron, after which the squadrons unless otherwise directed, are marched to their parade grounds and dismissed.

In Line of Platoon Columns

With the following modifications, the rules for the review of the regiment in line apply.

When the colonel commands: 1. Prepare for review, 2. MARCH, each guidon takes post on the right of the first platoon of his troop; each captain six yards in front of his guidon; the chief of each first platoon and the squadron staff officers move up on the line of captains, the squadron adjutant on the right of the squadron staff; chiefs of rear platoons remain in place; the squadron sergeant-major and the non-commissioned staff officers other than regimental, in line with the leading platoons.

When the reviewing officer has passed around the regiment the colonel commands: 1. Pass in review, 2. Column of platoons, 3. First troop, first squadron, 4. Forward, 5. Guide right, 6. Column right, 7. MARCH. (See Par. 977.)

In Line of Masses.

The same rules apply as for the review of the regiment in line, except that when the colonel commands: 1. Prepare for review, 2. March, each captain takes post two yards in front of his guidon; chiefs of platoons remain in place; the staff in line with the captains of the leading troops; non-commissioned staff, other than regimental, in line with the leading troops.

When the reviewing officer has passed around the regiment, the colonel commands: 1. Squadrons, 2. Change direction by the left flank, 3. MARCH.

The column having been formed, the colonel commands: 1. Pass in review, 2. Take full distance, 3. Guide right, 4. MARCH.

Each major takes post twenty yards in front of the center of his leading troop when his troops have full distance.

To march in review in column of platoons, the colonel commands:

Pass in review, 2. Column of platoons, 3. Forward, 4. Guide right,
 MARCH.

The major of the first squadron commands: 1. First troop, 2. Right by platoon, 3. March, 4. Guide right.

The first troop executes the movement, followed by the others executing the same movement when at the proper distance; the other squadrons execute the same movement, each when at the proper distance.

BRIGADE REVIEW.

The brigade is formed in line of masses or in line of platoon columns, with an interval of sixty-four yards between regiments.

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Each colonel causes his regiment to prepare for review as prescribed in Regimental Review.

The brigade commander takes post thirty yards in front of the center of the line of colonels.

On the arrival of the reviewing officer, the brigade commander causes his trumpeter to sound *attention*, which is repeated in each regiment; each colonel then causes his regiment to draw saber.

The reviewing officer baving halted at thirty yards from the brigade commander, the brigade commander and his staff draw saber; the brigade commander then faces the brigade and causes his trumpeter to sound attention, and commands: 1. Present, 2. Saber, faces to the front and salutes the reviewing officer.

The reviewing officer having returned the salute, the brigade commander faces the brigade, commands: 1. Carry, 2. Saber, and faces to the front; he and his staff return saber and join the reviewing officer.

The reviewing officer accompanied by his staff, and the brigade commander and his staff, then proceeds to the right of the brigade, passing in front of the colonel of the first regiment, to the right of the line, thence around the brigade passing to the left in rear of the majors, and to the right in rear of the file-closers of the rear subdivisions.

The colonels remain at their posts facing to the front while the reviewing officer is passing around the brigade. When the reviewing officer leaves the right of the line, the brigade commander causes attention to be sounded; the colonels then command: 1. Attention, 2. Posts, and cause their squadrons to execute change direction by the left flank; the colonel of the leading regiment then gives the preparatory commands for passing in review in column of troops or platoons as prescribed in Regimental Review.

The brigade commander then causes the signal forward, march, to be sounded, which is repeated in the leading regiment.

The column moves off as in Regimental Review.

The colonels of the center and rear regiments give the commands for passing in review, each in time to follow the regiment preceding at sixty-four yards and subdivision distance.

Each colonel takes post twenty-four yards in front of his band when the head of his regiment has made its second change of direction.

The brigade commander takes post thirty yards in front of the colonel of the leading regiment, when at one hundred yards from the reviewing officer.

The brigade commander and colonels, when they have saluted,

turn out of the column and take post with the reviewing officer.

The review terminates when the rear squadron has passed the reviewing officer.

Division Review.

The division is formed in one, two or three lines of masses, or lines of platoon columns with an interval of one hundred yards between brigades.

Each regiment is prepared for review as prescribed in Brigade Review.

Upon the arrival of the reviewing officer, the general commanding the division joins and accompanies him, and causes the signal attention to be sounded, which is taken up in the right brigade of the first line.

In One Line.

The reviewing officer receives the salute of each brigade when he arrives at its right, except when he approaches a brigade from its left or front, in which case he receives the salute as prescribed in the Brigade Review.

The reviewing officer receives the salute of the right brigade, passes along its front from right to left, then receives the salute of the next brigade, and so on to the left of the division, thence in rear of the division to the right, and back to his post.

Each brigade commander salutes, facing to the front, then faces his brigade and brings it to carry saber, and remains at his post.

The reviewing officer having passed around the division, the division commander causes the signal attention to be sounded.

The commander of the right brigade then forms his brigade in column, and, when the signal forward, march, is sounded, gives the commands for passing in review as in the Brigade Review.

Each of the other brigades is called to attention, formed in column and put in march in time to follow the next preceding at a distance of about one hundred yards.

The division commander with his staff, flag and orderlies takes post thirty yards in front of the commander of the leading brigade when at one hundred yards from the reviewing officer.

The review is conducted as prescribed in the Brigade Review.

In Two or Three Lines.

The reviewing officer passes around each line in succession, beginning with the right brigade of the first line.

With this exception, the rules prescribed for the single line apply.

CORPS REVIEW.

The corps is formed in one, two or three lines, with each division in a single line of masses, or line of platoon columns, with an interval of one hundred yards between divisions.

On the arrival of the reviewing officer, the corps commander causes attention to be sounded, which is repeated by the trumpeter of the commander of the right division of the first line, and is taken up in the right brigade of that division.

The reviewing officer passes in front of the first line from right to left, receiving the salute of each brigade as prescribed in the Division Review, passes in rear of the line to its right, thence to the second line, passing around it in like manner, and so on.

Each division commander accompanied by his staff, joins the reviewing officer and corps commander as they approach his division, and accompany them while passing in front and in rear of his division; he then remains near the right of his division.

The reviewing officer having passed around the troops, the corps commander causes attention, and forward, march, to be sounded; the march in review is conducted on the principles for the review of a division.

On approaching the reviewing officer, the corps commander places himself about fifty yards in front of the commander of the first division.

The artillery of the corps is reviewed as prescribed in the Drill Regulations for Artillery.

The review of a command larger than a corps is conducted on the same principles.

The troops may be marched in review in column of masses.

GUARD MOUNTING.

Mounted.

(The present signal assembly of guard details followed by boots and saddles is the first call for mounted guard mounting, and is followed at a prescribed interval by to horse; adjutant's call follows the signal to horse at a prescribed interval.)

At to horse, the men warned for duty form in single rank, at stand to horse, on their troop parade grounds, the non-commissioned officers falling in as file-closers; the supernumeraries do not fall in; each first sergeant verifies his detail and inspects the dress and general appearance; he then mounts, draws saber and causes his detail to mount.

The band takes post on the parade so that the left of its front rank shall be sixteen yards to the right of the guard when the latter is formed.

At adjutant's call, the adjutant proceeds to the parade ground and takes post so as to be twelve vards in front of and facing the center of the guard when formed; the sergeant-major reports to the adjutant and takes post facing to the left, the croup of his horse twelve yards from the left of the band, on a line with its front rank; the details are marched to the parade ground by the first sergeants, the first sergeants with their sabers drawn, the details at return saber; the detail that arrives first is so marched to the line that upon halting, the man on the right shall be on a line with the sergeant-major and one yard in front of the sergeant-major's horse; the first sergeant having halted his detail, places himself in front of and facing the sergeant-major at a distance a little greater than the front of his detail; he then commands: 1. Right, 2. Dress: the rank dresses up to the line of the sergeant-major and first sergeant; the non-commissioned officers rein back so as to be six yards in rear of the rank; the first sergeant commands: Front, salutes with the saber and then reports: The detail is correct; or, (so many) sergeants, corporals or privates are absent; the sergeant-major or acting sergeant-major, then returns the salute with the right hand; the first sergeant then passes by the right of the guard and rear of the sergeant-major, and takes post six yards in rear of the non-commissioned officers of the guard.

The other details, as they arrive, are formed in like manner on the left of the first; the rank, non-commissioned officers, and first sergeant of each detail dress on the rank, non-commissioned officers and first sergeant of the detail next preceding.

The troop details alternate in taking the right of the line.

When the last detail has formed, the sergeant-major draws saber, verifies the details, causes the guard to count fours, and if there be more than three fours, divides the guard into two platoons; he then commands: 1. Right, 2. Dress, verifies the alignment of the rank, the line of non-commissioned officers, and the first sergeants, and then returns to the right of the rank, turns to the left, commands: Front, passes to a point midway between the adjutant and center of the guard, halts facing the adjutant, salutes, and reports: Sir, the details are correct; or, Sir, (so many) sergeants, corporals or privates are absent; the adjutant returns the salute, directs the sergeant-major: Take your post, and then draws saber; the sergeant-major turns to the left and takes post facing to the front, three yards to the left of the rank.

When the sergeant-major has reported, the officer of the guard takes post, facing to the front, six yards in front of the center of the guard and draws saber.

The adjutant then directs: Inspect your guard, sir; at which the commander of the guard turns about, commands: 1. Inspection, 2. Arms, and inspects the guard.

During the inspection the band plays.

The adjutant, during the inspection, observes the general condition of the guard, and, when so directed, selects an orderly for the commanding officer; he may require a trooper to move out of the rank, and to dismount for a more minute inspection; he also notifies the two senior non-commissioned officers to serve as chiefs of platoons. If any trooper does not present a creditable appearance, his captain is notified through the first sergeant and sends a trooper to the officer of the guard, at the guard house, to replace him.

If there be a supernumerary officer of the guard, he takes post, facing to the front, six yards in front of the center of the first platoon; he may be directed by the commander of the guard to assist in inspecting the guard; the adjutant notifies the senior non-commissioned officer to serve as chief of the second platoon.

If there be no officer of the guard, the adjutant inspects the guard, and during inspection, notifies the senior non-commissioned officer to command the guard, the next two senior non-commissioned officers to serve as chiefs of platoons.

The inspection ended, the adjutant places himself about thirty yards in front of and facing the center of the guard; the officers of the day take post in front of and facing the guard, about thirty yards from the adjutant; the old officer of the day three yards to the right of and two yards less advanced than the new officer of the day; the officer commanding the guard takes post facing to the front, six yards in front of the center of the guard, and thereafter takes the same relative positions as the captain of a troop.

The adjutant then commands: 1. Draw, 2. Saber, 3. Sound off.

The band, playing, passes in front of the officer of the guard to the left of the line and back to its post on the right, when it ceases playing.

The adjutant then commands: 1. Attention, 2. Posts, at which the chiefs of platoons take their posts two yards in front of the center of their platoons facing to the front, and the commander of the guard, if not already there, takes post six yards in front of the center of the guard facing to the front; the file-closers close to two yards from the rank.

The commander of the guard and chiefs of platoons having taken their posts the adjutant commands: 1. Present, 2. Saber, faces toward the officer of the day, salutes and then reports: Sir, the guard is formed.

The new officer of the day, after the adjutant has reported, salutes with the hand and directs the adjutant: March the guard in review, sir.

The adjutant turns about, brings the guard to a carry and commands: 1. Platoons right, 2. MARCH.

The platoons execute the movement as explained in the School of the Troop; the band takes post in front of the column. The adjutant places himself abreast of the first platoon and six yards from its left flank; the sergeant-major abreast of the second platoon and six yards from its left flank.

The adjutant then commands: 1. Pass in review, 2. Forward, 3. Guide right, 4. March.

The guard marches at the walk past the officer of the day, according to the principles of review, the adjutant, the commander of the guard, chiefs of platoons, sergeant-major and chief trumpeter saluting. The new officer of the day returns the salute of the commander of the guard with the hand.

The band, having passed the officers of the day, turns to the left out of the column, places itself opposite and facing them and ceases to play when the rear of the column has passed; the trumpeters detach themselves from the band when the latter turns out of the column, and remain in front of the guard, commencing to play when the band ceases. In the absence of the band, the trumpeters do not turn out of the column, but continue to play in front of the guard.

The guard having passed the officer of the day, the adjutant halts, the sergeant-major halts abreast of the adjutant and one yard to his left; they then return saber and retire. The commander of the guard forms it into column of fours, without halting, and marches it to its post. The officers of the day turn toward each other and salute, the old officer of the day turning over the orders to the new officer of the day.

While the band is sounding off, and while the guard is passing in review, the officers of the day and first sergeants remain at attention; the first sergeants return saber and retire at the same time as the adjutant and sergeant-major.

When the guard is not divided into platoons, the adjutant commands: 1. Guard right, 2. March, and it passes in review as before; the commander of the guard is two yards in front of its center; the

adjutant is six yards from and abreast of its left flank; the sergeant-major covers the adjutant, abreast of the file-closers.

The officer of the day may direct the adjutant: March the guard to its post, sir. The adjutant then faces the guard, and commands:

Guard to its post,
 Fours right,
 March;
 r,
 Right forward,
 Fours right,
 March,
 or causes the guard to march at the trot.

The trumpeters take post in front, and the guard marches off in column of fours; the adjutant, sergeant major and first sergeants return saber and retire; the officers of the day salute each other and the band retires.

As the new guard approaches the guard house, the old guard is formed in line at the carry, its trumpeters two yards to its right; when the trumpeters at the head of the new guard arrive opposite its left, the commander of the old guard commands: 1. *Present*, 2. Saber, and when the new guard has passed, commands: 1. *Carry*, 2. Saber.

The new guard marches at the walk past the old guard, sabers at the carry, commanders of both guards saluting.

The trumpeters and guard continue marching, without changing direction, until the rear of the column has passed eight yards beyond the trumpeters of the old guard, when the commander of the new guard commands: 1. Fours right, 2. MARCH, 3. Guide right.

The trumpeters and guard are marched three yards in rear of the line of the old guard, when the commander of the new guard commands: 1. Fours right about, 2. MARCH, 3. Guard, 4. HALT, 5. Left, 6. Dress, 7. Front.

He then, facing to the front, aligns his guard so as to be on a line with the old guard.

The new guard having been dressed, the commander of each guard, in front of its center, facing to the front, commands: 1. Present, 2. Saber, and salutes.

The officers having saluted face their guards and command: 1. Carry. 2. Saber, 3. Return, 4. Saber.

Should the guard be commanded by a non-commissioned officer, he takes post as prescribed for the officer of the guard and presents saber with his guard.

The reliefs call off from right to left and are marched in column of fours or twos; the sentinels are posted successively from the head of the column; the sentinels relieved form successively in rear of the column.

The detachments and sentinels of the old guard are relieved, and, as they come in, they form on its left; both guards draw saber; the

commander of the old guard then marches it with the guide right, twelve yards to the front, when he commands: 1. Fours right, 2. MARCH.

The guard wheels by fours to the right, the trumpeters begin to play, and the guard marches at the walk past the new guard, which stands at present saber, commanders of both guards saluting.

On arriving on the regimental, post or camp parade ground, the commander of the old guard forms it in line and halts it, draws cartridge, orders successively the troop details six yards to the front, and sends each, under charge of a non-commissioned officer or private, to its troop.

When sentinels and detachments are at a considerable distance from the headquarters of the guard, the old and new guards are dismounted while awaiting the return of the reliefs.

In bad weather, at night, or after long marches, the music may be dispensed with, or the trumpeters may take the place of the band and sound off, standing on the right of the guard, and the review be omitted.

Dismounted.

(The present signal assembly of guard details is the first call for guard mounting, dismounted.)

Guard mounting dismounted is conducted in single rank on the same principles as guard mounting mounted, with the following modifications:

At the assembly, the men warned for duty fall in on their troop parade grounds, non-commissioned officers and supernumeraries falling in as file-closers; each first sergeant then verifies his detail, inspects the dress and general appearance and replaces by a supernumerary any man unfit to march on guard.

The sergeant-major takes post, facing to the left, sixteen yards from the left of the band; the band plays in quick or double time; the details are marched to the parade ground, with arms at the right shoulder; the detail that arrives first is so marched that, upon halting, the breast of the man on the right shall be near to and opposite the left arm of the sergeant-major; the first sergeant, having halted his detail, commands: 1. Open ranks, 2. March.

The rank dresses up to the line of the sergeant-major and first sergeant, the man on the right placing his breast against the left arm of the sergeant-major; the non-commissioned officers step back and halt three yards in rear of the rank; the supernumerary steps back and halts three yards in rear of the non-commissioned officers.

Seeing the rank opened, the first sergeant commands: FRONT, salutes, reports, passes by the right, takes post three yards in rear of his supernumerary and orders arms.

When the sergeant-major has reported, the officer of the guard takes post three yards in front of the center of the guard and draws saber.

The adjutant then commands: 1. Officer (or officers) and non-commissioned officers, 2. Front and center, 3. March.

The officer advances and halts three yards from the adjutant; the non-commissioned officers carry arms, pass by the flanks and form in the order of rank from right to left, three yards in rear of the officer; the adjutant then assigns the officer and non-commissioned officers according to rank in the following order:

Commander of the guard, chief of first platoon, chief of second platoon, right guide of first platoon, left guide of second platoon, left guide of first platoon, right guide of second platoon, and file-closers.

The adjutant then commands: 1. Non-commissioned officers; or, 1. Officer and non-commissioned officers, 2. Posts, 3. March.

At the command march, all except the officer commanding the guard, face about and take post as follows:

Chief of first platoon, three yards in front of the center of the first platoon; chief of second platoon, three yards in front of the center of the second platoon; right guide first platoon, on the right of the rank of first platoon; left guide second platoon, on the left of the rank of the second platoon; left guide first platoon, in the line of file-closers in rear of the second man from the left of the first platoon; right guide second platoon, in the line of file-closers in rear of the second man from the right of second platoon; file-closers, three yards in rear of the rank, to the right of the left guide first platoon, and to the left of the right guide of the second platoon; each orders arms when he takes his post. A non-commissioned officer commanding the guard takes post on the right of the right guide first platoon. A non-commissioned officer designated as chief of platoon takes post in the line of file-closers opposite the center of his platoon.

The adjutant then directs: Inspect your guard, sir.

During the inspection the adjutant replaces by the supernumerary any man who does not present a creditable appearance.

The inspection ended, the officer commanding the guard takes post three yards in front of the center of the guard.

The adjutant then commands: 1. Parade, 2. Rest, 3. Sound Off. After the band sounds off, the adjutant commands: 1. Guard, 2. Attention, 3. Close ranks, 4. March.

The file-closers close to two yards from the rank; the officer commanding the guard faces about and takes post facing to the front, two yards in front of the center of the guard; if there be a supernumerary officer of the guard, he takes post in the line of file-closers opposite the center of his platoon.

In presenting the guard to the officers of the day, the adjutant commands: 1. Present, 2. Arms.

When forming column of platoons to march in review, each chief of platoon after verifying the alignment of his platoon, takes post two yards in front of its center, facing to the front; the left guide of the first platoon and the right guide of the second platoon place themselves on the left and right flanks of their respective platoons. A non-commissioned officer commanding the guard takes the post of an officer commanding the guard, when in column or passing in review.

The adjutant brings the guard to a right shoulder.

The guard marches in review at quick time, and is brought to a carry by the commander of the guard when at forty yards from the officer of the day.

While the band is sounding off, and while the guard is marching in review, the officers of the day stand at parade rest with arms folded, and come to attention before the guard is to be presented and again as the head of the column approaches.

The first sergeants and supernumeraries come to parade rest and attention with the guard; they remain at order arms while the guard is being presented and formed into column.

The senior first sergeant commands: 1. Parade, 2. Rest, at the command march, for passing in review, and: 1. Supernumeraries, 2. Attention, when the officers of the day come to attention.

The first sergeants come to parade rest, and to attention with the supernumeraries. When the adjutant halts, after the guard has passed in review, each first sergeant marches his supernumerary to the troop parade ground and dismisses him.

When the guard is directed to march to its post, it may be marched in double time.

The new guard marches in quick time past the old guard, arms at a carry; the trumpeters having marched three yards beyond the trumpeters of the old guard, change direction to the right and, followed by the guard, change direction to the left when on a line with the old guard; the changes of direction are made without command. The commander of the guard halts on the line of the rank of the old guard, allows his guard to march past him, and, when its rear approaches, forms it into line to the left, halts it, establishes the left

guide three yards to the right of the trumpeters of the old guard and on a line with its rank and then dresses his guard to the left.

The new guard being dressed, the commander of each guard in front of and facing the center commands: 1. Present, 2. Arms, faces to the front and salutes.

The commanders having saluted, each faces his guard and commands: 1. Carry, 2. Arms, 3. Order, 4. Arms.

Should a guard be commanded by a non-commissioned officer, he presents arms with the guard, standing on the right or left of the rank, according as he commands the old or new guard.

The old guard is advanced six yards and then marched by the flank, in quick time, past the new guard.

Before dismissing the troop details, the commander of the old guard causes the guard to open chamber.

For detailed instructions for guards and sentinels, see Manual of Guard Duty.

SQUADRON PARADE.

At to horse the troops are formed mounted on their respective parade grounds and are inspected by their captains; the inspection being completed, adjutant's call is sounded, at which the squadron is formed on the squadron parade ground (Par. 708).

The band takes post on a line with the rank of the squadron, the left of its front rank sixteen yards from the flank of the squadron; the trumpeters form with the band.

The sergeant-major, having posted the last guide in his wing, takes post four yards on the left of the rank facing to the front.

The adjutant, having posted the last guide in his wing, takes post facing to the left two yards to the right of the rank on the line of captains.

The staff, except the adjutant, takes post four yards to the right of and in line with the chiefs of platoons, in the order of rank from right to left, the senior on the right. The non-commissioned staff and regimental non-commissioned officers take post in a similar manner two yards to the left of the sergeant-major.

The major takes post at a convenient distance in front of the center of the squadron, facing the line.

As soon as the adjutant sees that the last troop has formed on the line, he directs the first captain to cause his troop to draw saber. The captains, commencing on the right, successively turn about and command: 1. (Such) troop, 2. Draw, 3. SABER, and resume their front.

The adjutant takes post four yards to the right of the staff, and commands: Sound off.

The band, playing a march, passes in front of the captains, to the left of the line, and back to its post on the right, when it ceases playing. At evening parade, when the band ceases playing, retreat is sounded by the trumpeters.

When the music ceases, the adjutant moves up on the line of captains, turns to the left and commands: 1. Squadron, 2. Attention, 3. Prepare for parade, 4. March.

At the command march, the commissioned officers commanding platoons ride forward and halt on the line of captains; the guidon of each troop, if not already there, takes post on the right of his troop, passing in rear of the rank; non-commissioned officers commanding platoons take post on the line of the rank one yard to the right of the guidon, or one yard to the left of the troop, according as their platoons are on the right or left of the center of the troop; a non-commissioned officer commanding a troop takes post on the line of the rank to the right of the chiefs of platoons on the right of the troop; the staff officers move up and halt on the line of captains; all dress to the right.

The adjutant verifies the alignment of the officers, the rank and the file-closers. The officers and file-closers cast their eyes to the front, as soon as their alignment is verified.

The adjutant having verified the alignment returns to the line of captains, turns to the left, halts, commands: Front, then moves at the trot or gallop by the shortest line to a point midway between the major and the center of the squadron, faces the squadron, halts and commands: 1. Present, 2. Saber. He then turns left about, salutes the major, and reports: Sir, the parade is formed.

The major returns the salute and directs the adjutant: Take your post, sir. The adjutant moves at a trot or gallop, and, passing by the major's right, takes post, facing the squadron, three yards to the left of the major and one yard less advanced.

The adjutant having taken his post, the major draws saber, commands: 1. Carry, 2. Saber, and adds such exercises in the manual of arms (saber, carbine and pistol,) or saber exercise as he may desire, concluding with the squadron at return saber.

The officers do not return saber.

He then directs the adjutant to receive the reports, and returns saber. The adjutant, passing by the major's left, advances at a trot or gallop toward the center of the line, halts midway between it and the major, and commands: 1. First sergeants, 2. Front and center, 3. Trot (or gallop.) 4. March.

At the first command, the first sergeants and chief trumpeter ${
m draw}$ saber.

At the command *march*, they leave their posts, and passing in rear of the line of officers assemble opposite the center, facing to the front. The adjutant then commands: *Report*.

The chief trumpeter and first sergeants, commencing on the right, successively salute and report: The chief trumpeter, Band and trumpeters present or accounted for; or, (so many) musicians or trumpeters absent; the first sergeants, Troop "D," etc., present or accounted for; or, (so many) sergeants or corporals or privates absent.

The reports having been made, the adjutant commands: 1. First

sergeants, 2. Posts, 3. Trot (or gallop), 4. MARCH.

At the command march, the chief trumpeter and first sergeants successively turn to the right and left, resume their posts and, except the chief trumpeter, return sabers. Each first sergeant passes around the right flank of his troop.

The adjutant then turns about, salutes and reports: Sir, all are present or accounted for; or, (so many) officers or enlisted men are absent. The major returns the salute and directs: Publish the orders, sir.

The adjutant turns about and commands: Attention to orders; he reads the orders and then commands: 1. Officers, 2. Center, 3. March.

At the command officers, all the officers return saber.

At the command march, the officers turn and close toward the center and successively turn to the front and halt eleven yards from the line; the two officers nearest the center preserve an interval for the adjutant, who passes through, four yards to the rear, turns about and halts; all the officers having formed, the adjutant rides up to his place. The senior troop officer commands: 1. Forward, 2. Guide center, 3. MARCH.

The officers advance, the band playing; the adjutant is the guide and marches on the major; at six yards from the major, the senior troop officer commands: 1. Officers, 2. Halt.

The music ceases; the officers halt and salute, keeping the hand at the visor till the salute is returned, and dropping it at the same time with the major's. The major then gives such instructions as he may deem necessary, and this concludes the ceremony.

As the officers disperse, the music is resumed; each first sergeant draws saber, rides in front of his troop, commands: Posts, and marches his troop to its parade ground and dismisses it; the band plays till the troops leave the parade ground.

The commanding officer may direct that the first sergeants march their troops in line, or column of platoons, around the parade ground, as in passing in review; after passing the major, they march them to their troop parade grounds and dismiss them. Or, the commanding officer may direct that the troops move off in echelon and march to their parade grounds. In these cases, the officers, unless excused, remain with the major until the troops have passed.

Previous to executing the saber exercise, the major may cause the troopers to take distances to the front (Par. 416).

The troop officers, staff and non-commissioned staff officers, regimental non-commissioned officers, band, and non-commissioned officers commanding troops or platoons advance and preserve their positions relative to the rank of Nos. 1; the guidons stand fast until Nos. 4 have their distances, then move up and halt in line with them. The file-closers preserve their relative distances in rear of Nos. 4. At the conclusion of the parade, each first sergeant causes his troop to form rank, and dismisses it as prescribed.

The squadron may be formed in line of platoon columns.

The parade is conducted as when in line, with the following modifications:

At the command prepare for parade, march, the captains and guidons if not already there, take post on the right of their respective troops (Par. 611) each guidon passing by the rear of his first platoon; the lieutenants take post on the line of captains, the first lieutenant in front of the center of the first platoon, the second lieutenant in front of the left of the first platoon, the additional second lieutenant midway between the first and second lieutenants. A non-commissioned officer commanding the first platoon takes post one yard to the right of the guidon; a non-commissioned officer commanding a troop takes post on the right of the chief of the first platoon; a non-commissioned officer commanding a rear platoon remains in front of his platoon.

REGIMENTAL PARADE.

The regiment is formed in line, or in line of platoon columns. At to horse, the troops are formed and inspected.

At adjutant's call, each squadron is formed in line; the squadron adjutant, having taken his post in front of the center before reporting the squadron to the major, receives the reports of the first sergeants as prescribed in the squadron parade.

When the squadrons are formed, adjutant's call is again sounded; the regiment is then formed in line or line of platoon columns; each major, as soon as his squadron has formed on the line, commands:

1. Prepare for parade, 2. March, verifies the alignment regulating on the base squadron, commands: Front, and moving at a trot or gallop takes post twenty yards in front of and facing the center of the squadron; he then commands: 1. Draw, 2. Saber, and faces to the front.

The lieutenant-colonel takes post twenty yards in front of the right flank.

The post of the adjutant is six yards to the right of the post of the lieutenant-colonel.

The sergeant-major takes post six 'yards to the right and abreast of the rank.

The other non-commissioned staff officers, etc., take post as in Par. 880.

The adjutant, after indicating the point of rest and direction of the line, takes his post and faces to the left; when the last squadron has formed, he turns to his left, commands: Sound Off, and takes his post facing to the front.

The band, playing, passes in front of the adjutant and field officers to the left of the regiment and back to its post on the right, when it ceases playing.

The adjutant then moves by the shortest line, at a trot or gallop, to a point midway between the colonel and center of the regiment, faces the regiment and commands: 1. Squadrons, 2. Attention, 3. Present, 4. Saber, faces the colonel, salutes and reports: Sir, the parade is formed.

The colonel returns the salute and directs the adjutant: Take your post, sir. The adjutant takes post three yards to the left of the colonel and one yard less advanced, passing by his right and rear.

The colonel and staff officers draw saber; the colonel then commands: 1. Carry, 2. Saber, and adds such exercises in the manual of arms or saber exercise as he may desire, concluding with the regiment at return saber.

The colonel then directs the adjutant to receive the reports, and returns saber; the staff, except the adjutant, return saber at the same time.

The adjutant advances by the left of the colonel toward the line, halts midway between the colonel and center of the regiment, and commands: 1. Adjutants, 2. Front and center, 3. Trot (or gallop), 4. MARCH.

At the command march, the squadron adjutants, passing in front of the troop officers, close to the center and halt, facing to the front, midway between the line of field and troop officers. The adjutant then

commands: Report; the squadron adjutants, commencing on the right successively salute and report: (Such) squadron present or accounted for; or, (Such) squadron (so many) officers and enlisted men are absent. The adjutant then commands: 1. Adjutants, 2. Post, 3. Trot (or gallop), 4. MARCH.

The squadron adjutants, moving by the shortest lines, then take post in the line of field officers, each three yards to the left of the major of his squadron. The adjutant then faces the colonel, salutes and reports: Sir, all are present or accounted for; or, Sir, (so many) officers and enlisted men are absent. The colonel returns the salute and directs: Publish the orders, sir. The adjutant faces the regiment, commands: Attention to orders, publishes the orders, and then commands: 1. Officers, 2. Center, 3. MARCH.

At the command officers, all the officers return saber.

At the command march, the troop officers turn and close toward the center, and successively turn to the front and halt eleven yards from the line; the two officers nearest the center preserve an interval for the adjutant, who passes through, four yards to the rear, turns about and halts; the lieutenant-colonel, the squadron commanders and their adjutants turn individually left about, move to the rear and form on the line of officers; the lieutenant-colonel and the commander of the first squadron, with his adjutant on his left, on the right of the line; the commanders of the second and third squadrons, each with his adjutant on his left, are on the left of the line; all the officers having formed, the adjutant rides up to his place.

The lieutenant-colonel or senior squadron commander then commands: 1. Forward, 2. Guide center, 3. March.

The officers advance, the band playing; the adjutant is the guide and marches on the colonel; at six yards from the colonel, the lieutenant-colonel commands: 1. Officers, 2. Halt.

The ceremony then concludes as prescribed in the squadron parade.

The lieutenant-colonel and adjutant join the colonel; all the other officers rejoin their squadrons; the squadrons are marched to their parade grounds and dismissed.

TROOP INSPECTION.

Being in line at a halt, the captain commands: 1. Prepare for inspection, 2. MARCH, 3. FRONT.

The chiefs of platoons take post four yards in front of their posts in line, i. e., six yards in front of their platoons; the guidon on the right of the rank; the right principal guide one yard to the right of the guidon; the trumpeters two yards to the right of the right principal.

cipal guide, on a line with the rank; the other file-closers one yard to the left of the rank; the left principal guide on their left. All dress to the right.

The captain verifies the alignment of the chiefs of platoons and the line, commands: FRONT, and takes post in front of the guidon in line with the chiefs of platoons.

The chiefs of platoons cast their eyes to the front as soon as their alignment is verified.

The captain commands: 1. Inspection, 2. Arms.

The troop is inspected as in Par. 410.

The trumpeters raise their trumpets for inspection when the inspector approaches to inspect carbines.

When the captain dismounts the troop, the guidon dismounts with it; the chiefs of platoons return saber, dismount and stand to horse facing their platoons; the captain dismounts and his horse is held by his trumpeter. If the arms are not to be inspected, the commands therefor are omitted.

The chiefs of platoons, when the inspection of the rank begins, face toward the troop and remain at ease, resuming their front on the completion of the inspection of arms, or the captain may require one or both lieutenants to accompany or to assist him; if dismounted, their horses are held by trumpeters. The captain may require each chief to inspect his own platoon, himself making a general inspection.

While inspecting the troop or accompanying the inspector, the captain does not return his saber while mounted; if dismounted he returns saber.

To resume the posts in line, the captain commands: 1. Attention, 2. Posts.

The chiefs of platoons turn to the left about, move forward, and by another left about resume their places; the right principal guide turns to the right about and resumes his post; the trumpeters resume their places; the file-closers on the left of the rank successively turn to the left about and resume their places in rear of the rank.

Should the inspector be other than the captain, the captain prepares the troop for inspection and awaits the orders of the inspector. Upon the approach of the inspector, the captain at his post in front of the guidon salutes him; the inspector returns the salute and informs him of the kind of inspection; the captain gives the necessary commands, faces to the front and, when inspected, accompanies the inspector.

At inspection of quarters, the men, without accourrements, stand uncovered in front of their respective bunks; in camp, they stand

covered, without accourrements, in front of their tents; the senior non-commissioned officer, upon the approach of the inspector, commands: 1. *Troop*, (or *squad*,) 2. ATTENTION.

The men come to attention and do not salute; in camp the non-commissioned officer salutes.

TROOP INSPECTION DISMOUNTED.

The troop is formed for inspection as when mounted.

Arms are inspected as prescribed in the School of the Soldier.

At the command inspection arms, the lieutenants carry saber, and when the inspection of the rank begins, face about and stand at ease, saber at the order; upon the completion of the inspection of arms and ammunition, they come to attention, carry saber, face to the front and order saber.

SQUADRON INSPECTION.

If there be both inspection and review, the inspection may either precede or follow the review.

The squadron being in column of troops at full distance, the major commands: 1. Prepare for inspection, 2. March.

Each troop forms for inspection as prescribed in Troop Inspection. The trumpeters return to their troops.

The band, if there be one, passing by the right flank of the squadron, takes post facing to the front, sixteen yards in rear of the rear troop, and opens ranks.

The guard of the standard is marched by the adjutant, and takes post twelve yards in front of the center of the first troop.

The staff officers form on a line equal to the front of the first troop, fifteen yards in front of the standard, the adjutant on the right, the others in the order of rank from right to left, the senior next the adjutant.

The non-commissioned staff and regimental non-commissioned officers form in a similar manner, six yards in rear of the staff, the sergeant-major on the right.

The major takes post in front of the center of the column, six vards in front of the staff.

Field and staff officers senior in rank to the inspector do not take post in front of the column, but accompany him.

After being inspected, the major and staff officers return saber, and the inspector, accompanied by these officers, passes down the column looking at the front and rear of each rank.

The major now commands: Rest.

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The inspector, commencing at the head of the column makes a minute inspection of the non-commissioned staff and regimental non-commissioned officers, the guard of the standard, and the arms, accourrements, dress, ammunition, horse and equipments of each trooper of the several troops in succession, and inspects the band.

The adjutant gives the necessary commands for the inspection of the non-commissioned staff and regimental non-commissioned officers, the guard of the standard and the band.

The non-commissioned staff, regimental non-commissioned officers and guard of the standard may be dismissed as soon as inspected.

As the inspector approaches each troop in succession, its captain commands: 1. Troop, 2. Attention, 3. Inspection, 4. Arms, and takes his post in front of the guidon; as soon as inspected, he accompanies the inspector.

The inspection being finished, the captain, on intimation from the inspector, marches the troop to its parade ground and dismisses it.

The band plays during the inspection of the troops.

In a long column, some of the rearmost troops, after the inspection of dress and general appearance, may be permitted to dismount and rest; before the inspector approaches, each is called to attention and mounted.

The inspection of dress and general appearance may be dispensed with; on intimation of the inspector, the squadron is brought to rest as soon as the major and staff have been inspected.

After the inspection of dress and general appearance, if the inspector desires to inspect the squadron dismounted, the major causes the troopers to take distances to the front (Par. 416) and dismounts them; or, dismounts the squadron without forming rank.

At inspection of quarters, the inspector is accompanied by all the officers, or by such of them as he may designate.

REGIMENTAL INSPECTION.

The regiment being in column at full distance, the colonel commands: 1. Prepare for inspection, 2. March.

Each squadron forms for inspection as prescribed in Squadron Inspection.

The band takes post in rear of the regiment.

The guard of the standard is marched by the adjutant and takes post six yards in front of the major of the first squadron.

The staff officers of the colonel form on a line equal to the front of the column, fifteen yards in front of the standard, the adjutant on the right, the others in the order of rank from right to left, the senior next the adjutant; the non-commissioned staff and regimental non-commissioned officers form in a similar manner six yards in rear of the staff officers, the sergeant-major on the right; the colonel takes post six yards in front of the center of the column; the lieutenant-colonel takes post three yards to the left of the colonel.

The colonel, lieutenant-colonel, and staff officers of the colonel, as soon as inspected, return saber and accompany the inspector, who then inspects the dress and general appearance of the regiment.

The adjutant brings the non-commissioned staff and regimental non-commissioned officers to a rest as soon as the inspector begins his inspection of the first squadron.

Each major accompanies the inspector while inspecting his squadron and then brings his squadron to a rest.

The inspector after passing to the rear of the regiment, commences again at the head of the column, makes a minute inspection of the regiment as prescribed in Squadron Inspection. Each major with his staff officers accompanies the inspector through his squadron, after which the major marches his squadron to its parade ground and dismisses it.

REGIMENTAL OR SQUADRON MUSTER.

Muster is preceded by an inspection, and when practicable by a review.

The adjutant is provided with the muster roll of the field, staff and band; the surgeon with the hospital roll, and each captain with the roll of his troop. A list of absentees alphabetically arranged, showing cause and place of absence, accompanies each roll.

Being in column of troops at prepare for inspection, each captain, as the mustering officer approaches, causes the sabers to be drawn and commands: Attention to muster.

The mustering officer, or captain then calls the names on the roll; each man, as his name is called, answers here, and returns saber.

Dismounted, each captain, as the mustering officer approaches, commands: 1. Right shoulder, 2. Arms, 3. Attention to muster. Each man, as his name is called, answers: Here, and brings his carbine to order arms.

Men who are not formed with the troop, and who attend muster without arms, are two yards on the left of the rank; each, as soon as he answers: *Here*, passes two yards in front of the rank from left to

right, salutes the mustering officer as he passes him, and quits the parade ground.

After muster, the mustering officer, accompanied by the troop commanders and such other officers as he may designate, verifies the presence of men reported in hospital, on guard, etc.

A troop may be mustered in the same manner on its own parade ground, the muster to follow the troop inspection.

ESCORT OF THE STANDARD.

The regiment being in line, at carry saber, the colonel details a troop, other than the standard troop, to receive and escort the standard to its place in line.

The escort is formed in column of platoons, the band in front, the standard bearer between the platoons. The escort then marches without music to the colonel's quarters, is formed in line facing the entrance and halted, the band on the right, the standard bearer in the line of file-closers.

The first lieutenant, standard bearer, and the right principal guide, dismount in front of the colonel's quarters, their horses being held by a trumpeter; the standard bearer, preceded by the first lieutenant and followed by a sergeant of the escort, then goes to receive the standard.

When the standard bearer comes out, followed by the lieutenant and sergeant, they halt before the entrance and mount, the lieutenant on the right, the sergeant on the left; the trumpeter returns to his post; the captain then commands: 1. Present, 2. Saber; the escort presents saber, the trumpeters sounding to the standard.

The sabers are brought to the carry; the lieutenant and sergeant return to their posts; the troop executes platoons right; the standard bearer places himself between the platoons.

The escort marches with the guide left, back to the regiment, the band playing; the march is so conducted that when the escort arrives at fifty yards in front of the right of the regiment, the direction of the march shall be parallel to its front; when the standard arrives opposite its place in line, the escort is formed in line to the left and halted; the standard bearer, passing between the platoons, advances and halts twelve paces in front of the colonel.

The standard bearer having halted, the colonel, who has posted himself thirty paces in front of the center of his regiment, faces the line, commands: 3. *Present*, 4. SABER, faces to the front and salutes;

the trumpeters sound to the standard, and the standard bearer returns the standard salute.

The colonel then faces about, brings the regiment to a carry and the standard bearer, passing through the interval to the left of his troop, turns to the left about and takes his place in the guard of the standard. The escort presents and carries saber with the regiment at the command of the colonel, after which the captain forms it in column and marches it to its place in line, passing around the left flank of the regiment.

The standard is escorted by the guard of the standard from the parade ground of the standard troop to the colonel's quarters.

ERRATA.

Page 309, General Rules; first line should read: "On occasions of ceremony, except Funeral Escort," etc.

Page 313, second line; for "eight yards" read "six yards."

PROFESSIONAL NOTES.

A NEW METHOD OF THROWING HORSES.

The subject of throwing horses for disciplinary purposes and for the performance of surgical operations, is one of great importance to troop commanders. For several years I have used this means of reducing refractory, obstinate and vicious horses to the proper degree of obedience, thus convincing them of their utter inability to contend, with any chance of success, against their natural masters. With this view of the importance of this matter, it was with considerable dismay that I read in the last JOURNAL (March, 1890, pp. 63-5,) the plan of throwing contemplated by the Tactical Board and recommended by Captain George A. Dodd, Third Cavalry. I will cite a few of the numerous objections to this method:

1. The length of time required to cast the animal. I have known it require, under this old "Rarey System," from ten to twenty minutes to get the horse on his side. In fact, without pushing him over, it cannot be accomplished until he is exhausted.

2. The danger to the operator. There are horses in my troop which I do not think any man would dare to stand beside as contemplated in this method.

3. The danger of injury to the horse himself. The certainty of his bruising or breaking his knees, unless they have been previously padded, and the probability of his breaking his neck or knocking out his teeth.

4. The difficulty of keeping the horse down after he is thrown, etc., etc. Several years ago I ran across, somewhere in my researches for authorities on the horse, a small pamphlet by John Grace, a California trainer, I believe, who advocated the following method of "casting," which I shall transcribe in nearly his own words:

"The easiest and most effectual method of throwing a horse is to strap up the near fore foot, put on a surcingle with a ring fastened to the top of it, tie a half inch rope around his neck halterwise, placed up near the throat latch with the knot on the near side of the face. Pass the rope into the mouth and bring it along his neck on the off side, then pass it through the ring in the top of surcingle on the back,

standing off on the near side about six or eight feet from the horse and opposite the near hind leg, keeping the rope sufficiently tight to prevent him from disengaging it from his mouth. Pull carefully until he yields his head a little to the off-side, then give a sharp, strong, continuous pull until the horse falls, which will occupy from one to five seconds. As he goes down, lying on the near side, keep the rope tightened and he cannot get up. * * * He can be thrown on either side by this process with perfect safety."

For tying up of the fore leg I use a strap similar to the one described in the Journal as No. II. Of course it will be understood that if the animal is to be thrown on his right side, the process is reversed, the off fore leg being tied up. Instead of webbing in the surcingle, I use canvas, doubled, three and one-half inches wide, and very strong; the ring must be very securely fastened to the canvas This method is safe for horse and operator, is absolutely surcingle. sure and the casting can be accomplished by any man, no matter what the strength of the horse. The only objection to it is the "burning" of the animal's mouth by the friction of the rope. My troop farrier (HUNT) suggested a very simple method of obviating even this objectionable feature. It is merely to attach to the regulation halter an adjustable strap one inch wide, with a sliding loop and buckle, this strap to pass under the animal's chin and to be fastened to the two lower rings in the cheek strap; in other words to be adjusted in opposition to the nose band. When drawn taut it will prevent the halter from slipping up. The casting rope need not then be passed through the horse's mouth nor tied around his neck; instead, secure the end of the rope in the lower ring in cheek piece of the halter, or, better still, in an additional ring attached by a strap, one inch wide and six inches long to the halter ring. This strap when doubled will bring the additional ring about two and one-half inches from the horse's lower jaw, and when the rope is tightened at right angles to it. This will give sufficient purchase for the operator to govern the animal's head.

This morning I selected the wildest and strongest horse in the troop, (six years old, weighing 1250 pounds) and after adjusting the surcingle and rope one man threw him, the first time in eight seconds and the second time in three.

After the animal has been thrown a few times he can be made to lie down by the rider raising the left fore leg, and at the same time pulling the head gently to the right with the reins.

On horses with very low withers a crupper should be attached to the sureingle.

I submit this plan for what it is worth, in no wise claiming for myself the credit for its origin, and would be glad to have it discussed by some of our practical horsemen.

Very respectfully,

J. L. RICHARDS, Jr., First Lieutenant, Fourth Cavalry.

A NOTE ON THE TRAINING OF RECRUITS.

Now that the different methods of obtaining recruits are attracting so much attention in army circles a few words on training them may not be out of place.

By the present system of sending recruits from rendezvous to Jefferson Barracks for a certain time before assigning them to regiments, it is intended to instruct them thoroughly in the duties of the individual soldier. But as a matter of fact the instruction which they receive there amounts to very little, so little that troop commanders find it necessary to start their recruits in the very elements, the same

as though they had received no instruction at all.

In place of this system I suggest, at least for those cavalry regiments stationed in the southwest, say Texas, Arizona and New Mexico, where out-door drills may be carried on every day in the year, that recruits be sent out in detachments every three months direct from rendezvous to regimental headquarters, and there placed under the command and instruction of the regimental adjutant, for, say a nominal period of six months. If a recruit becomes thoroughly proficient in his duties as an individual soldier and in those as a member of a squad before the end of six months assign him to a troop and let him choose the one he will go to provided there is a vacancy. On the other hand if a recruit is backward and he does not reach the required standard of proficiency at the end of six months turn him back into the next succeeding class of recruits so that he would be nine months under instruction.

This system would necessitate detaching to regimental headquarters one non-commissioned officer and about three horses from each troop, provided the band be mounted and the band horses be used for recruits.

After this system once got under way there would be two classes of recruits of about fifty men each under instruction at once, and every three months well instructed and well set up and disciplined men could be assigned to troops and at once taken up for duty. Troop commanders would then cease having to bother with three or four recruits at a time, and instead of having them drilled for a month or so in a haphazard manner by any non-commissioned officer who happened to be available each day, and finally taking them up for duty when only half instructed, they would have men turned over to them thoroughly drilled and instructed under the supervision of the regimental adjutant—presumably one of the smartest and best officers of the regiment—and by non-commissioned officers specially selected for their military bearing and qualifications for imparting instruction.

This would also afford a good school for the youngsters when first joining from the academy; a place where they could be broken in under the eyes of the colonel and adjutant, and taught the hardest and most important duties a cavalry officer has to learn, viz: the individual instruction of men and horses.

Keeping the recruits at regimental headquarters and having all

their time for six months devoted to theoretical and practical instruction, would enable the adjutant to make smart and efficient soldiers of them. They should not be put on post guard except during the last month, and then only for instruction. They might, however, be put on stable guard and fatigue during the last three months, thus taking care of their own stable and horses.

One objection which will probably occur to troop commanders is that it would keep their troops reduced in numbers. This would be the case to a certain extent; troops would only average fifty-four or fifty-five men; but this objection is believed to be more than counterbalanced by having all the men of the fifty-four or fifty-five well instructed soldiers individually, at least.

This system would also increase the labors of the regimental adjutant a great deal, but it would give him a power and influence in his regiment and encourage him to be a real soldier and not a mere head clerk. Besides, if the post adjutant's duties were taken off his hands, it is believed he would have ample time to attend to his regimental ones.

WM. H. SMITH, First Lieutenant Tenth Cavalry.

THE SHOEING OR NON-SHOEING OF CAVALRY HORSES.

I have been much interested in the discussion carried on in the June number of the Journal relative to the shoeing or non-shoeing of cavalry horses.

Some fifteen years ago the same question excited attention, but the outbreak of the great Sioux-Cheyenne war, following the occupation of the Black Hills buried it out of sight.

With your permission I will repeat the views formed at that time, to which I still adhere.

There has been much experience gained upon this point, both by ourselves and by the Indan tribes employed as our allies or pursued as our enemies. Picket line experiments are not to be relied upon any more than we should trust the chemist's crucible to determine the market value of a mine.

No argument can be based upon the fact that the horse in a wild or half-wild state has no shoes; he has no weight to carry or to haul, can pick his own path instead of following blindly in column, and when tired, can rest and roll—comforts which the cavalry animal, bitted, saddled and heavily burdened cannot hope to enjoy.

Where the soil of a territory is homogeneous, say, for example, sandy, like the greater part of Arabia, the valley of the Gila, and the Mongolian habitat near the desert of Gobi, or, a mixture of sand and clay like the section of the Missouri Valley forming the eastern portions of South Dakota, Nebraska and Kansas, or alluvial, like the low countries, the horse or mule, whether as a pack or saddle animal, in garrison or in campaign might be trusted unshod, but no

such confidence can be reposed in the strength of its hoofs, when through changes of climate or changes of soil it is at one moment compelled to tread upon soft clay and at another upon hard rock, or hard rock altogether.

The Arabians, the Mongols, the Pima Indians of the Gila valley, let their animals go unshod because the regions they inhabit come

under my first classification.

I should say, however, that in December, 1872, I was a member of an expedition which entered the Superstition Mountains and the Cañon of the Salt river in Arizona; one morning we recaptured a herd of Pima ponies abandoned by the Apache raiders because their hoofs had become worn out in the mountains.

When we hunt for examples among Indians living in mountainous or rocky countries, we find one of two things: either, each warrior going on a campaign provides himself with two, or even three ponies, which, in consequence are not subjected to the constant strain which the single horse of the cavalryman must endure; or, if unable to provide more than one animal he will beg, borrow or steal shoes for at least the fore feet, from the quartermaster.

I can recall instances in support of this statement from scouts of the Crow, Ree, Shoshonee, Arapahoe, Cheyenne, Sioux, Pawnee, Navajo, Apache, Hualpai, Pima and other tribes.

The Hualpai Indians, living in the Grand Cañon of the Colorado—the best possible country in the world for the "unshod" theory to be proved in, if it be the correct one—never failed to shoe the fore feet of their ponies when it could be done.

"Skopus" (The Strong Man,) known to the whites as "One-eyed Miguel," chief of the Mogollon or White Mountain Apaches, had a blacksmith's kit in his band as far back as 1869. There were some among the Navajoes about the same time and the names of two of the chiefsof the latter tribe; "Herrero Primero" and "Herrero Segundo" (first blacksmith and second blacksmith) are not altogether without significance.

It was not always, of course, possible for savage Indians to supply their animals with iron shoes; substitutes were, however provided in the shape of raw-hide boots, put on green and allowed to dry. Specimens of such shoes I obtained from the Apaches eight or ten years ago and at various times since, and have deposited a set in the National Museum. In 1886 Captain Vielle, Tenth Cavalry, brought to me at Fort Bowie, a set which he had cut from the hoofs of a Chiricahua pony abandoned on the trail by "Geronimo."

Very truly yours,

Washington, D. C., July 27, 1890.

JOHN G. BOURKE,

Captain, Third Cavalry.

A SHORT TALK ON HOOFS AND HORSE-SHOEING.

Every eavalry officer knows, or should know, that the good condition of the hoofs is deserving of the greatest attention.

This is especially true of horses for cavalry, for undoubtedly the most efficient services are performed by this branch of the service when mounted, and a mount with sore or diseased hoofs will always prove to be a very poor mount.

To insure a good condition of hoofs, one of the prime features is proper and practical shoeing, that is, if horses are to be shod at all. To decide whether or not horses are to be shod, let us look at the origin of horse-shoes.

In the earliest stages of horse-shoeing, shoes consisted of iron plates curved upward at the edges, conforming in shape to sandals, the human foot-gear of those days. Those shoes were tied, later strapped to the pastern and the shank.

When nails were first introduced, the iron plates had been changed to the form of the hoof, covering it entirely, and had a hole in the center.

These shoes were undoubtedly the outcome of the necessity to have something to resist the wear and tear of hoofs after the introduction of artificial roads covered with stones and gravel.

Thus it is seen that shoes were introduced for use on hard roads, and it seems therefore that horses in cities, especially, should not be without shoes.

A famous German cavalry officer, Count Rosenberg, continually objected to the shoeing of cavalry horses and persisted in calling shoes "a necessary evil while horses are in cities, but an unnecessary evil while in the field."

It is evident that interference with the works of nature generally is more or less of an evil, and the penetration of the hoofs with nails and their coercion by the shoes is certainly such interference.

As the U. S. Cavalry principally does duty in regions where hard roads are rather the exception, it would seem that in that case horseshoeing is an "unnecessary evil."

But as the customs provide for the shoeing of horses, we will now consider a serviceable and rational system of shoeing.

The hind feet need no shoes at all, for on soft ground a healthy hoof is ample for any work required of a saddle-horse. If any shoeing is to be done, let it be confined to the front feet, for these are more easily worn off.

The English custom of having the shoeing done at the stables in the regular stalls, and not at a shop, seems a good one. This does away with all unnecessary excitement, to which every horse, when placed in or tied to a strange stall, is more or less subject.

At any rate the shoeing of all horses should be superintended by an experienced officer, who should require each horse after being shod to be led past him, both at a walk and a trot. If he notices the slightest imperfection in the motion of the feet, he should order the shoes to be removed and refitted.

Imperfect nails should never be used and nails improperly placed should be removed at once.

While it is injurious to keep shoes on too long, on the other hand too frequent changing is also detrimental. Twenty-two days has proved to be a good average for keeping shoes on the feet.

Before each drill all shoes should be closely inspected, for a horse may fall on account of a loose shoe, and if a shoe should come off while the horse is in motion, it would almost always carry a piece of the hoof with it.

When preparing the hoof great care should be exercised. Every dead substance should be removed, but no live parts should be touched. Great attention must be paid to the proper and careful removal of effete portions of the frog, and that the hoofs should never be left too long.

With the hoofs great care and special cleanliness are essential; but next to frequent cleaning of hoofs, something should be done toward strengthening them. Frequent rubbing of the hoof inside and outside with pure lard keeps it pliable and in good condition.

A. L. B.

BATTERY "B," FOURTH U. S. ARTILLERY IN CAMP.

Battery "B," Fourth U. S. Artillery, Major Harry Cushing, commanding, are in camp in this city in the fields near the Seekonk river on South Angell street. The battery is out on practice march and duty by special orders from the War Department. It left Fort Adams at 11 o'clock Thursday morning and marched on that day as far as Stone Bridge, camping there that night. Friday at 6:30 A. M. the march was resumed, and evening found the company in camp at Rumstick Neck. At 5:45 A. M. Saturday the march was again resumed, and the camping ground on South Angell street was reached at 9:30 o'clock. The battery as it is now in camp numbers four guns and forty-eight officers and men all told.

Arrived in camp, tents were pitched immediately, the guns parked, horses picketed, commissary quarters established and within the hour the battery was receiving its first cleaning since its departure from Fort Adams. The men had also groomed their horses, and were looking after their personal appearance. The cook was preparing dinner for 12 o'clock, and appearances indicated long established camping quarters. At 2 o'clock the battery according to orders, marched to the Dexter Training Ground for the purpose of drill, which also included that of firing off forty rounds. The battery has only 100 rounds of ammunition, for the caissons had to be used for baggage, as only one small army wagon could be procured for this march. The battery will strike camp on Monday morning and march to Scituate, thence to South Manchester and New London, Connecticut, and crossing the ferry, proceed through South County towns to

the fort, arriving there about July 10th. The march is primarily to test the endurance of the horses to march without shoes, report of which will be made to the War Department. The horses have been on short marches around Newport, and have been picketed on paved ground at the fort, and their hoofs are hard as flint. There are as yet no signs of lameness in any of the horses. It is said that the artillery and cavalry horses at Fort Riley, Kansas, have not been shod for more than a year, and with but very little resulting lameness.

The drill by the battery at 3 o'clock on the Training Field was a splendid sight, and extremely interesting. It was in accordance with the provisional new tactics issued, but not adopted as yet, by the

Government.—Providence Sunday Journal, June 29, 1890.

Editor Journal U. S. Cavalry Association, Fort Leavenworth, Kansas.

MY DEAR SIR: —The review, in your March number, of the work "Regimental Losses in the Civil War," was read with interest; and although you take exceptions to some points, the article was read with pleasure also, for intelligent criticism is welcome at all times.

In justice to myself, however, I would say that I anticipated your idea of consulting regimental histories as well as official records, and examined carefully the roster in every regimental history that has been published. The individual records as given in these histories were of great assistance in determining the losses; especially, in distributing a loss to the actions in which it occurred, the muster-outrolls too often recording a man as killed, without giving the date or place of death.

My figures for the loss of the Sixteenth German Infantry (Third Westphalian) at Mars-la-Tour were taken from the official publications of the German Government, compiled by Dr. Engel, the Director of the Royal Statistical Bureau. As stated there, the loss was:

	Killed.	Wounded.	Missing.	Total.
Officers	23	18	_	41
Non-commissioned officers	. 52	56	14	122
Enlisted men	. 434	545	342	1321
			-	
Total	509	619	356	1484

In this statement the mortally wounded are included with the killed. You will notice, also, that this loss includes 356 who were captured or missing.

In the German army, Franco-Prussian War, there were eight regiments only whose casualties exceeded 1,000 in any one action;

or, about thirty-five per cent. They were as follows:

Sixteenth Infantry, Mars-la-Tour.	1484*
Twenty-fourth Infantry, Vionville	1092
Forty-sixth Infantry, Worth	1016
Fifty-second Infantry, Mars-la-Tour	
First Grenadier-Guard, St. Privat-la-Montaigne	
First Foot Guards, St. Privat-la-Montaigne	
Second Foot Guards, St. Privat-la-Montaigne	1075
Third Foot Guards, St. Privat-la-Montaigne	1090

^{*}Including 356 captured or missing.

In each case, just mentioned, the regiment sustained its loss in its first engagement, into which it carried its full complement of 3,000 men, or not far from that number. A German regiment of infantry numbered, when full, 3,006 officers and men, not including non-combatants.

Mention should also be made of the Garde-Schutzen Battalion (1,000 strong, not including non-combatants) which sustained 461 casualties at St. Marie-aux-chênes. This battalion, during the entire war, lost 119 killed, and sixty-one mortally wounded; total, 180, or eighteen per cent.

But the Second Wisconsin lost 19.7 per cent. in killed; and, that too, as based on an enrollment which included non-combatants. Someone will probably say in reply: "But the Franco-Prussian war was a short one, and hence smaller percentages of loss." Well, the Fifty-seventh Massachusetts lost 19.1 per cent. in killed, and yet this regiment was not organized or recruited until April, 1864, the last year of the war. The First Maine Heavy Artillery sustained all its terrible losses—19.2 per cent. killed—within the last eleven months of the war.

In the German army there were only three regiments whose loss in killed and mortally wounded exceeded twelve per cent. of their enrollment. Nor would a prolongation of the war necessarily have resulted in any larger percentage; for it would have necessitated the filling up of these regiments, and the increased enrollment would then have decreased their percentage of loss.

Another thing regarding the comparative length of these two wars. The Union armies during the four months following May 5, 1864, sustained a loss greater than that of the German army during the whole Franco-Prussian war. Nor were these Union losses fruitless and unproductive of adequate results. They brought us victory; they gave us Atlanta, and the final position at Petersburg.

Yours very respectfully,

WILLIAM F. FOX.

THE NEW GAS GUN.

At the headquarters of the London Scottish Rifles yesterday afternoon some interesting experiments were conducted with M. Paul Giffard's appliance for the employment of liquefied gas as an explosive—or, to be more strictly accurate, one should say as a means of propelling projectiles—in place of gunpowder. M. Paul Giffard's scientific reputation as inventor of the pneumatic tube, and of the "Giffard injector," so largely used in connection with steam power, stands so high that any invention to which his name was attached would be worthy of attentive consideration.

The weapon now introduced by him, however, is something more than an ingenious appliance; it is a discovery which not only promises to revolutionize the gunmaker's art, but it is applicable also to many other purposes as a motive power. Those who are interested in the

Giffard gun claim that it is the military weapon of the future. The idea of using liquefied carbonic acid gas as a propulsive power is not new, but Mr. GIFFARD is the first who has turned it to practical account.

The gas gun is a model of simplicity, so far as one can judge without examination of the discharging mechanism, in which much of the merit of M. Gifford's invention lies. A small cylinder, called a cartouche, is attached to the barrel of a rifle or a smooth-bore gun. This cylinder contains liquefied gas enough to discharge 220 shots, equal to about fifty bullets of an ordinary service rifle, with a velocity to kill at 600 yards. There is no other explosive. The pellet is simply dropped into an aperture of the barrel, which is hermetically sealed by pressing a lever, and the loading is complete. When the trigger is pressed a small quantity of liquefied gas becomes released and expands in the breech chamber. There is no louder report than the drawing of a champagne cork makes; no smoke and no fouling of the barrel. In all these respects M. Giffard's gas gun seems to fulfill the requirements of an ideal weapon for warfare; but whether in other respects liquefied gas has advantage over ordinary explosives for military purposes remains to be proved. The inventor says there would be no difficulty in refilling the cylinders with gas on the battlefield; but it is obvious, even if that be the case, that reserve cylinders would have to be supplied to each man, in order to make up the number of rounds now thought to be necessary; and, as bullets would of necessity be carried in addition, the ammunition for a gas gun would weigh just as much as ordinary cartridges, weight for weight. -London Daily News.

GEORGIA CAVALRY IN CAMP.

* * * * * * * * * * *

As the left battalion came up, the long column of cavalry filed through the gate of the track and formed column of companies. It was the first time in all my visits to State encampments that I had seen more than two companies, and much as I had heard of the excellence of this command, I was not prepared for such an appearance. The material is the very pick and flower of the young men of the southern portion of the State. A large number owned their own horses, and those who did not had the use of horses from friends. Every horse was a genuine saddle horse bitted and broken. The men were such horsemen as could only be found in a community where every fairly well-to-do boy rides almost as soon as he walks.

The Georgia Hussars, Colonel Gordon's old troop, rode with a very handsome seat, much like the English military, but which looked better because there was not the studied effort to drop the heel, which gives the straddling or tongs across-a-wall effect. The Liberty troop had a true cavalry seat which was not as handsome to a soldier's eye, but they are holy terrors in keeping the saddle. There were in their ranks a lot of Texas ponies, and some of them knew how to buck in

good frontier style, but they could just as easily have tossed Pawnee Bill or Mexican Pete as these long-legged Georgia boys. I had little faith in militia cavalry. I had been accustomed to the big rawboned animals hired for the occasion from street car and omnibus lines, and the appearance of a cavalry orderly pounding across the field riding all over his horse, was an occasion for endless mirth to the infantry. Here I saw companies moving in admirable dress, ranks closed boot to boot, officers splendidly mounted and splendid horsemen, and the whole command infused with the finest soldierly

spirit.

This is due to the admirable material, to the fact that the officers were the pick of a picked organization and that Colonel Gordon is not only the best disciplinarian in the State, but that he has that rare union of unruffled courtesy with the most unbending sense of duty, which has enabled him to bring out the very best results from this high spirited and intelligent material. I do not mean that they drilled in all the movements as well as our regular cavalry, but I do say that they kept their horses better closed than many regulars I have seen, and that while their mounts and their horsemanship would com pare well with the best we've got, their swordsmanship, owing to constant practice in tilting and head-cutting is ahead of anything in America except a picked squad of West Point cadets. Lieutenant Colonel Wylie, a tall, handsome soldierly figure, is probably the most finished horseman in the State of Georgia. At the close of the ceremony which was really good, except that the battalions would not take the commands "attention," "carry" and "present arms" from the Adjutant-General, but waited for their own commanders, the adjutants and field officers came to the front and closed in good shape. Lieutenant Lawton of the cavalry battalion, an admirable soldier, splendidly mounted, would have done credit to the famous Fifth Horse in the days when Charley King was adjutant.—The Spirit of the South, New Orleans, August 3, 1890.

WANTED!!

An honest able bodied snap shot, of sound mind. No "quick aim shot," though he may by actual practice demonstrate his ability to shoot a pistol more quickly and more accurately than the bona fide "snap shot," need hope to palm himself off for the latter.

We must have a snap shot. See page 223, JOURNAL OF THE U.S. CAVALRY Association for June, viz: "We must have snap shooting and nothing else." We were led to believe that our agent had secured us a "snap shot" some time ago, but upon examination and close scrutiny we caught him peeping over the sights as his pistol was fired; he tried hard to explain to us that it was a way he had, which really had nothing to do with his skilful use of the pistol. Our agent, a very blameless man, shed a silent tear, and simply replied: "Oh come off."

Any one having a live snap shot, of strict probity, who is willing to lend him to us, may rest assured that we will take excellent care of him, and will try to keep his secret if he should by any accident be caught taking even a "suggestion of an aim." See page 223. JOURNAL OF THE U. S. CAVALRY ASSOCIATION for June.

We will be candid and state right here that no snap shot will be considered, who draws, and raises his pistol upward and fires, without first coming to "raise pistol." We make this stipulation for reasons that seem to be good. First, we are prejudiced in favor of this particular world, and are not altogether sure of any gentleman's chances for a better, who of his own free will, follows the profession of "snap shooting" at his fellow man; though he may never seriously damage anybody the intent is there, and with some of us, not only intent to kill, but a sincere suspicion that we may succeed, even if we look away, and try not to see what we are doing.

Our next reason for objecting to the "snap shot" who will not raise his pistol, is owing to the difficulty of training horses to curl their heads underneath their bodies while this kind of warfare is going on to the "front," and even if fairly well trained, he may grow tired of inspecting his obsolete toe, and wish possibly to count the killed and wounded, when up comes his head and off goes a reasonably good

ear, and maybe a better rider.

To secure the shot we want, for we must have one, no other conditions will be named. He may belong to an "inefficient officer who objects to an efficient weapon," regardless of the length of service or hard campaigns that may have helped to make the officer inefficient, at a time when service on the plains, if all accounts are true, was somewhat different from what it is at present, or regardless of the fact that he may be gifted enough by nature to have discovered a reason of his own for wishing to retain his present weapon until he is sure that the change is for the best. He may even doubt the unproved, though forcibly and confidently stated opinion, that "the present regulation gallop ruins the gait of the horse," to which gait the regulations alluded to, can hardly claim priority of discovery, dating as it does back to a period not within the memory of man, and somewhat later than the first discovery of the gait by the noble animal himself, doubtless sometime before the Aryan dispersion.

Minor points of this kind will be made to give way before the all important first requisite, to-wit: Wanted, an honest able bodied snap shot, too pure minded to tell a lie, and too unselfish to let his secret die with him.

G. A. PADDOCK, Captain, Fifth Cavalry.

BOOK NOTICES AND EXCHANGES.

Recollections of General Grant. By George W. Childs. Philadelphia. 1890.

History generally shows great commanders only as they appear at the heads of armies, and orators only as they appear in the tribune; while great authors are known to us not by their personality, but by the thoughts expressed in their books. It is but natural that we should desire to know our heroes as they exist in everyday life as well as in their more splendid spheres: to know them not as demigods, but as men. Personal reminiscences of famous men are, therefore, always welcomed by the reading public, as the complement of the picture presented by history.

In this little book, Mr. Childs introduces us, as it were, to General Grant, and acquaints us with the personal traits of one whom we have known only as a military leader. He shows us not the general, but the man; and the picture presented is drawn by the loving hand of a warm friend of the deceased chieftain.

Grant, it seems, was far from being an ardent student; but he was a careful, thoughtful reader; remembered what he read, and could make use of his knowledge. "His power of observation and mental assimilation was remarkable." Though known to the world as a reticent man, he was fond of talking when with his intimate friends, "doing perhaps two-thirds of the talking"; but the entrance of a stranger was sufficient to cause him to resume the taciturnity for which he was noted, and which seems to have been due solely to diffidence. His power of remembering faces and names was great, and having once fixed his mind upon a person he never forgot him. He was able to go without food or sleep for long periods, and was blessed with the power of sleeping whenever and wherever he chose. His nature was simple and guileless; and suspecting no guile in others, he was often deceived. When asked what feature of political life had caused him the most distress, he replied: "To be deceived by those I trusted." He was, himself, the soul of loyalty to his friends, and one of his favorite expressions was: "Never desert a friend under fire."

It will be a surprise to some to learn that General Grant had decided artistic taste, and that in his younger days he showed talent as

an amateur artist. He does not, however, seem to have had any corresponding talent for music, and once remarked that he knew only two tunes, one of which was Yankee Doodle and the other wasn't.

Grant, it seems, had almost a superstition in regard to turning back when he had once started for any destination; and Mr. Childs asks: "Was not this trait one of the secrets of his success in war?" Undoubtedly it was: it was certainly a valuable trait—a priceless superstition—just after the battle of the Wilderness. A similar trait is the foundation of Von Moltke's generalship: for the great German's prime rule of strategy is never to swerve from an object once selected, unless compelled by resistless circumstances to adopt a new plan.

Mr. Childs' little book is of more interest and value than many ponderous and pretentious ones that cumber the shelves of libraries. Incidentally, it makes us acquainted not only with General Grant, but with the large hearted philanthropist, whose friendship for the great captain was an honor to both.

A. L. W.

STANDING ORDERS, FIRST CORPS CADETS, MASSACHUSETTS VOLUNTEER MILITIA.

In this excellent little volume of 236 pages, is collated a brief historical sketch of the corps: its by-laws, bill of dress peculiar to the corps, rules for guard and camp duties, extracts from regulations The corps was organized in 1741 for special duty; was included in the volunteer militia in 1840; during the Rebellion it furnished nearly one hundred and fifty men to the army, nearly all of them to hold commissions. Membership is limited and can only be obtained upon the recommendation of a member. Par. 43: "No button intended to fasten, must be left unfastened," might well be added to our regulations. Regarding excuses from fines, Par. 76 has the true ring, and helps to account for the high standing and efficiency of this celebrated corps: "Play or pay; if the ranks lose the services of a soldier, the treasury gets the benefit of his fine." The instructions for sentinels, including grand rounds, challenges and answers are most complete. This little book cannot be too highly commended. Its 16. b. b. bar. value is increased by a copious index.

STRATEGIE TACTIQUE ET POLITIQUE. By General Jung. 316 pages, 8vo., Plates and Index. Paris: Charpentier et Cie. 3 Frs. 50c.

In this book General Jung, the well known author of "Bonaparte et son Temps," has made a valuable contribution to military literature. In the discussion of his subject, which may be translated as "Tactical and Political Strategy," he adopts the somewhat novel but very effective method of giving analogous definitions to the several branches of the subject and showing their mutual dependence upon and relation to each other. For example, he says: "Strategy and tactics taken together comprise all dispositions which tend to secure the judicious employment of men, means and methods, both before and during war. Military tactics comprises all dispositions which tend

to secure the judicious employment of men, means and methods for a purpose definitely known. Infantry tactics comprises all dispositions which tend to secure the judicious employment of the foot soldier, of the Lebel rifle, and of methods both in attack and defense. Cavalry tactics comprises dispositions which secure the judicious employment of the trooper, of his horse, and of the ground, both as regards the combat and the collection of information." Similar definitions are given for engineer troops, the administrative departments, the navy and general tactics; and an elaborate discussion of tactical qualities, and the participation of the state in tactical matters, is also furnished. Strategy he defines as "All the dispositions taken to secure the judicious employment of men, means and methods for a purpose not always immediate but always constant, which is the security of society," and he divides it into the following branches: positive. political, naval, and the participation of the state in active strategy. Under this head he also treats of strategical qualities, influence of political considerations, politics and their influence upon the army, etc.

The author has handled all these subjects with great thoroughness and perspicacity; throughout this book, as in so many recent French military writings, may be plainly seen his desire to reanimate the French army and restore its confidence. He pays us the compliment of saying: "The ideal formation for infantry is the American single rank with the men placed elbow to elbow." General Jung is apparently well satisfied with the present condition of the French army, and regards it as worthy of the pride and confidence of the nation. Interesting episodes described are the arrest and execution of the spy Schull in 1870, the actions and methods of Marshal Bazaine at Metz, the circumstances which prevented General Decaen from attaining a high command, and the curious prophecy of the battle of Werl. This instructive and entertaining treatise is recommended to the notice of every military student.

2.4. Wilson, § 2.4.

Practical Information for Non-Commissioned Officers on Field Duty. By Brevet-Colonel Guy V. Henry, U. S. Cavalry. 55 Pages. 1890.

The little pamphlet with the foregoing title is one more addition to the books which have been compiled by American army officers in the past two or three years in order to render possible the teaching to enlisted men many things absolutely necessary for them to know in order to be able to properly perform the duties required of them in garrison and in the field—but principally the latter. It is a sign of healthy progress that our officers are beginning to learn that the Army Regulations, valuable as it is, does not contain a complete course of instruction in the science and art of war, and that it is possible to offer to soldiers in a more pleasant and practical shape, a method of acquiring information absolutely essential to the welfare as well as the safety and success of an army.

Perhaps the multiplication of such text books, so common in all European armies may, in the near future, induce the War Department to recognize the necessity for the compilation of some book which, under the seal of its authority, may make instruction in all

field duties uniform throughout the army.

Colonel Henry has succeeded in introducing into his book under three heads, Camps, Marches and Useful Information, a large amount of valuable instruction for the inexperienced, as well as some which may present itself in the form of a genuine surprise to many who have seen years of service, but have always preferred to create their own art of war as the need for it arose, without troubling themselves

about other people's experiences or opinions regarding it.

To one remark of the author we wish to take decided exception, and that is, that "rifle practice is now admitted to be the most important part of the soldier's instruction," if by the word soldier is meant the trooper; for it requires no argument to show that, admitting the advantage possessed by the trooper who can handle his carbine effectively over one who can not, yet there are many other duties equally important which have been, to a certain extent lost sight of in the craze for making marksmen and sharpshooters out of cavalrymen. 6.6.6.borr.

GENERAL JOHN HAMMOND, COLONEL FIFTH N. Y. CAVALRY.

Among the blessings of war is the knowledge that a nation may depend upon her sons in case of need. Not till then does she know that there are men who will exchange the pleasures of wealth and home for danger, wounds and death or imprisonment. Such a man was John Hammond, Brevet Brigadier General U. S. Volunteers, Colonel Fifth New York Cavalry. He was one of the first to offer his services at the head of a company of his neighbors and friends whom he mounted and armed at his own expense. He served through most of the campaigns of the Army of the Potomac, was twice wounded, and won, on many fields, the praise of his superiors and the commendation of his foes. He was honored in peace as well as in war, and was followed to his grave by many sorrowing friends.

A memorial volume, recently published from the press of P. F. Pettibone & Company, Chicago, gives many of the incidents of General Hammond's adventurous career.

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THE IOWA HISTORICAL RECORD. July. 1890.

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No. 18: A Russian's Estimation of our Present Armament. Military Institutions of China. The War in Senegal. No. 19: The New Belgian Rifle. Carrier Pigeons. No. 20: The Russian Officer in Society and in the Army. No. 21: Continuation of the Russian Officer in the Army and in Society. No. 22: The Danish Rifle, Model of 1889. The Barrel Jacket in the German Rifle. The Russian Officer in the Army and in Society (concluded). No. 23: The Operations of the Geographical Service in 1889. The German Navy. American Indian (Chevenne) Cavalry. Field Stadiometer. No. 25: Servo-Bulgarian War of 1885. No. 26: One More Word Concerning the Servo-Bulgarian War of 1885. No. 26: Registering Apparatus for Regulating Ranges on the Battle Field. No. 27: Discussion of Two Year's Service in Germany. Mountain Artillery. The Chinese Navy. No. 29: The Curvigraph and Its Uses, Civil and Military. No. 30: The New German Firing Regulations. The Curvigraph (concluded). No. 31: The Trans-Sahara. Heligoland. Roman Fortifications. The New Austro-Hungarian Firing Regulations. No. 32: The Trans-Sahara (continued). The New German Firing Regulations (continued). Concerning the New Drill Regulations. No. 33: The Trans-Sahara (conclusion). The New German Firing Regulations (continued). No. 34: New German Firing Regulations (continued). No. 35: The Russian Maneuvers at Narva. A New Type of Officer's Revolver.

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